Pediatric Nutrition

(PedNSS)

Surveillance System

Summary of 2003 Data

South Dakota Department of Health
November 2004

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Pediatric Nutrition Surveillance System (PedNSS) Summary 2003

Information on the health of a population is essential for assessing health needs and planning programs to address those needs. Surveillance is the process of measuring specific health indicators in a given population on a continuous basis, allowing for the evaluation of a population over time.

This report provides a summary of the nutritional data collected in South Dakota through the Pediatric Nutrition Surveillance System (PedNSS) for the calendar year of 2003. PedNSS is a program of the Centers for Disease Control and Prevention (CDC) and was started in 1973. The first year of statewide data collection for South Dakota was 1995. Currently, nearly all the states and territories participate in PedNSS.

The data was obtained by using the records of infants and children participating in the South Dakota Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Data is available by clinic, county, region and state. Cheyenne River, Rosebud Sioux and Standing Rock Tribal WIC Programs data are not included in this report.

Data is presented in this report for the state as a whole, by regions and by county for each of the six nutrition indicators:
- Birth weight
    Low birth weight (less than 2,500 grams)
    High birth weight (over 4,000 grams)
- Short stature (low height-for-age)
- Underweight (low weight-for-height and low BMI-for-age)
- Overweight (high weight-for-height and high BMI-for-age)
- Anemia
- Breastfeeding
    Ever breastfed
    Breastfed at least 6 months
    Breastfed at least 12 months

Individual clinics and counties with 100 or more individual children that could be analyzed are also reported separately. All clinics in a county are reported in county totals. All clinics statewide are reported in regional and state totals.

Comparison of Data

PedNSS data can be collected in a variety of populations including WIC, Head Start, and Well Child Clinics (MCH). This report represents only infants and children participating in the WIC program of the South Dakota Department of Health. Care must be taken when comparing PedNSS data between states, as data is not always collected from identical populations. Care must also be taken when comparing the data in written reports before and after the recent PedNSS program changes in 2001. Data presented in the main body of the report, including trend data, reflects the updated analysis of PedNSS.

In calendar year 2003, WIC served an average of 4,789 infants per month. This would indicate that approximately 43 percent of the total resident births, 11,022, in South Dakota were infants on WIC. The percentage of children varies greatly by county. All WIC participants are of limited income at or below 185 percent of the federal poverty level and have been determined to be at nutritional risk.

Limitations of Data

This is the eighth year that PedNSS data has been reported for South Dakota. Overall, the quality of the data is very good, but some sites may have more errors than others. Biologically Implausible Values (BIV) have a 1/1000 chance of being true data and are therefore considered to be an error. BIV's were not included in the data analysis.

The population of some counties is very small. All reported counties and clinics must have had at least 100 participants to have data analyzed. Only the total number of records analyzed and the percent of records with values that fell within the criteria were given for each indicator with at least 100 usable records. Data from counties and clinics with fewer than 100 records were not provided in this report as small numbers do not produce stable rates. The data used to compile this report consist of one unduplicated record per indicator per child.

When applicable, confidence intervals are given along with the rate of incidence for each county as well as for the state rate. This interval is based on the particular rate's standard error. The standard error defines a percentage's variability and is also used in calculating a confidence interval that can determine the actual variance of a percentage 95 percent of the time. That is, an interval in which a particular percentage will fall 95 percent of the time. The standard error takes into account the size of the sample being surveyed.

By applying the following formulas the standard error and the 95 percent confidence interval can be computed for the percent of respondents reporting each condition in the given period of time.

95 % Confidence Interval:
  Percent $\pm$ (1.96 * Standard Error)

Standard Error
  Percent / Square Root of the number of respondents reporting the condition
    (This produces an estimate of the standard error)
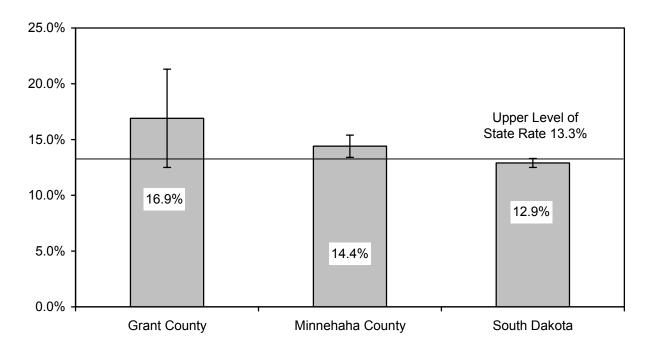
For example: the three-year PedNSS data, 2001-2003, indicates that 12.9 percent of the state's PedNSS children ages 2 to 5 years of age were overweight. This was based on roughly 3,246 records (25,161 x .129) that indicated the children were overweight. An estimate of the standard error for the percent of PedNSS children reported as overweight can be made by dividing the percent of children reported overweight (12.9) by the square root of the number of PedNSS children reported overweight (Square Root of 3,246 $\cong$ 57). This gives us an estimated standard error of .0.23 percent (12.9/57). Using the estimated standard error in the formula above the 95 percent confidence interval for the percent of overweight PedNSS children in the state for the three-year period can be calculated. Following this formula, we compute the 95 percent confidence interval for the state's rate of overweight children to be from 12.4 to 13.3 percent (12.9 ± 0.4).

Confidence intervals are useful where rates appear to be different, but the differences are not necessarily statistically significant. For example, in Grant County there were 40 records of the 237 (237 x .16.9) analyzed that indicated the child was overweight for the three years 2001-2003. This gave a rate of 16.9 percent, which appears to be well

above the state's rate of 12.9 percent. However, after computing the standard error, which takes into account the relatively few records in the county, we find that the 95 percent confidence interval is ±4.4 percent. This makes the 95 percent confidence interval from 12.5 to 21.3 percent, since the county interval overlaps the state's interval (12.5 to 13.3 percent), the differences are not statistically significant. On the other hand, compared to Grant County, Minnehaha County had a lower rate, 14.4 percent, but since there were more records, 554 of the 3,845 (3,845 x .144) analyzed that indicated overweight children, the 95 percent confidence interval is smaller (± 1.0 percent). Since Minnehaha County's confidence interval (13.4 to 15.4 percent) does not overlap the state's interval, the difference is statistically significant. The data used in these examples are from Table 15, page 48.

The three year data, provided in the tables, for the clinics, counties and regions that are significantly worse than the state wide values for that indicator are shaded to indicate these values are worse at the 0.05 level of confidence

Figure 1
Using Confidence Intervals to Compare Data
Overweight Births, 2001-2003 PedNSS Population

Demographic Data

A total of 31,837 records for 20,037 individual children are included in the 2003 analysis. This represents the total records submitted, including those records later rejected because of critical errors, missing data, biologically implausible values and duplicate entries for a given individual. After these records were removed, there were 4,968 unique records analyzed for low and high birth weight babies (biologically implausible values that were excluded from analysis were birth weights less than 250 grams and those greater than 6,000 grams); 19,578 records analyzed for short stature, underweight and overweight children; 13,994 records analyzed for low hemoglobin; and 5,012 records analyzed for ever breastfeeding, 2,841 for breastfed at least 6 months and 2,408 for breastfed at least 12 months.

The racial/ethnic composition of South Dakota's PedNSS population as compared to the composition of the state as a whole is shown in Table 1. The Summary of Indicators (Table 2) shows the number of visits and individuals served, age distribution, race/ethnicity, program composition, and prevalence of low/high and abnormal values. The risk of infant mortality and other pediatric health outcomes may vary between populations.

Table 1

Race/Ethnicity	2003 PedNSS Population	2000 SD Population (Census)*
White	69.4%	88.7%
Black	2.7%	0.8%
American Indian or Alaskan Native	26.8%	9.0%
Asian or Pacific Islander	1.1%	0.8%
All Other/Unknown	0.0%	0.7%
Total	100.0%	100.0%

* From the U.S. Census Bureau Website: http://www.census.gov
      Multiple race categories were collapsed into most common minority status.

Summary of Indicators

Table 2

Pediatric Nutrition Surveillance System
Summary of Indicators
Reporting Period 01/01/2003 to 12/31/2003

1. Total Records	Total Records (All Visits)	Individual Children
	31,837	20,037

2. Age Distribution	Age	Number	Percent
	0-5 Months	5,059	25.2%
	6-11 Months	2,746	13.7%
	12-23 Months	3,661	18.3%
	24-35 Months	3,069	15.3%
	3-4 Years	5,502	27.5%

3. Race/Ethnicity	Race	Number	Percent
	White	13,906	69.4%
	Black	532	2.7%
	American Indian or Alaskan Native	5,363	26.8%
	Asian or Pacific Islander	230	1.1%
	All Other/Unknown	0	0.0%

4. Program Composition	Program	Number	Percent
	WIC	20,037	100%
	EPSDT	0	0.0%
	Medical Attention	0	0.0%
	Well Child (MCH)	0	0.0%
	Head Start	0	0.0%
	School Entrance	0	0.0%
	All Other	0	0.0%

Summary of Indicators

Table 2 (Continued)

Pediatric Nutrition Surveillance System
Summary of Indicators
Reporting Period 01/01/2003 to 12/31/2003

5. Prevalence of Low/High and Abnormal Values	Indicators	Individual Children	Percent
	Birth Weight		
	Low < 2,500	4,968	8.0
	High > 4,000	4,968	9.4
	Height and Weight		
	Short Stature < 5th Percentile	19,578	6.1
	Short Stature < 10th Percentile	19,578	10.6
	Underweight < 5th Percentile	19,578	3.5
	Underweight < 10th Percentile	19,578	6.2
	Overweight ≥ 95th Percentile (0-5 years)	19,578	12.7
	Overweight ≥2 years Old		
	Overweight 85th-< 95th Percentile	8,423	17.7
	Overweight ≥ 95th Percentile	8,423	13.6
	Anemia		
	Low Hemoglobin and/or Hematocrit	13,994	7.6
	Breastfeeding		
	Ever Breastfed	5,012	55.9
	Breastfed At Least 6 Months	2,841	22.0
	Breastfed At Least 12 Months	2,408	13.1

Overview of PedNSS Indicator Change
2002-2003

Indicators	Year 2003	Year 2002	Percent Change
Birth Weight			
Low			
South Dakota	8.0%	8.5%	-5.9%
United States	8.9%	9.0%	-1.1%
High			
South Dakota	9.4%	9.9%	-5.1%
United States	7.6%	7.9%	-3.8%
Short Statue			
South Dakota	6.1%	6.1%	0.0%
United States	6.3%	6.4%	-1.6%
Underweight/Overweight (Ages 0 to 5 years)			
Underweight			
South Dakota	3.5%	3.5%	0.0%
United States	5.4%	5.4%	0.0%
Overweight			
South Dakota	12.7%	12.6%	+0.8%
United States	13.5%	13.1%	+3.1%
Overweight and At Risk of Overweight (Ages 2 to 5 years)			
At Risk of Overweight			
South Dakota	17.7%	16.6%	+6.3%
United States	15.4%	15.3%	+0.7%
Overweight			
South Dakota	13.6%	12.8%	+6.3%
United States	14.3%	13.4%	+6.7%
Anemia			
South Dakota	7.6%	6.5%	+16.9%
United States	13.6%	13.3%	+2.3%
Breastfeeding			
Ever Breastfed			
South Dakota	55.9%	56.7%	-1.4%
United States	52.5%	51.1%	+2.7%
At Least 6 Months			
South Dakota	22.0%	24.1%	-8.7%
United States	20.8%	20.3%	+2.5%
At Least 12 Months			
South Dakota	13.1%	14.1%	-7.1%
United States	12.3%	13.3%	-7.5%
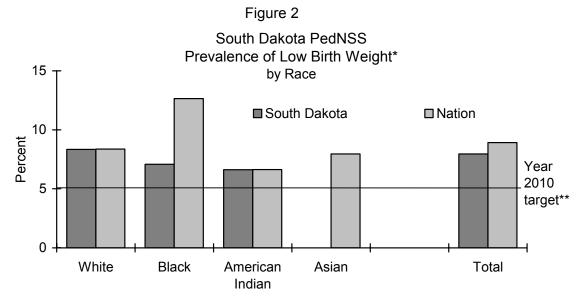
Birth Weight

Low Birth Weight

The system allows for analysis of low and high birth weight. Low birth weight is defined as a birth weight below 2,500 grams (or 5.5 pounds) and is a strong indicator of an increased risk of neonatal mortality. For infants weighing 2,500 grams or less, mortality rates increase rapidly with decreasing birth weights.

The South Dakota PedNSS population had a low birth weight rate of 8.0 percent in 2003, down from 8.5 percent in 2002. The Healthy People 2010 goal is 5.0 percent. The South Dakota PedNSS population had a low birth weight rate of 8.0 percent over the three-year period 2001-2003. The United States PedNSS population had a low birth weight rate of 8.9 percent in calendar year 2002.

Low birth weight is a nutrition indicator of the PedNSS system that is also collected by other means in this state. The South Dakota Department of Health, Office of Data, Statistics and Vital Records, collects birth weight information from birth certificates. Birth records for calendar year 2003 show that 6.7 percent of live births in South Dakota were low birth weight births.

Figure 2

South Dakota PedNSS
Prevalence of Low Birth Weight*
by Race

* < 2500 grams, among infants born during the reporting period.
**   Reduce low birthweight to 5% of live births.
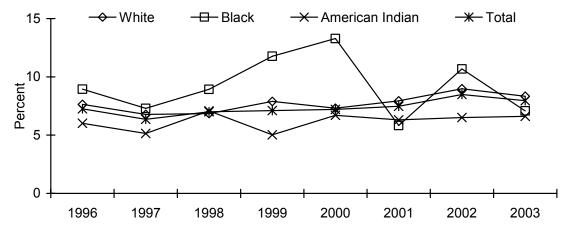
There are many risk factors that are known to potentially cause low birth weight and intrauterine growth retardation, although determining specific causes of low birth weight in segments of the population is difficult. Risk factors associated with low birth weight include: demographics (maternal age, marital status, ethnicity, education, and income), medical risks existing before pregnancy (weight status, obstetric history, parity and congenital anomalies), medical risks existing in current pregnancy (pregnancy induced hypertension, multiple pregnancy, poor weight gain), and environmental/behavioral factors (smoking, substance abuse, low socio-economic status, and poor nutrition).

Figure 3

South Dakota PedNSS
Trends in Prevalence of Low Birth Weight*
by Race

* < 2500 grams, among infants born during the reporting period.
Year 2010 target: Reduce low birthweight to 5% of live births

The percentage of low birth weight varied by race in South Dakota's 2003 PedNSS population. The rates were 8.3 percent for whites, 7.1 percent for blacks, 6.6 percent for American Indian and Alaskan Natives.
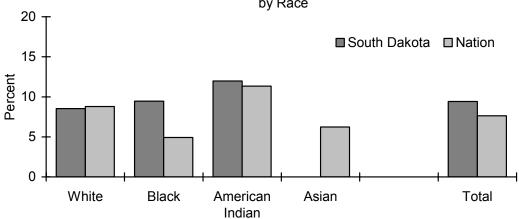
High Birth Weight

High birth weight is defined as a birth weight higher than 4,000 grams (or 8.8 pounds) and may also be called Large for Gestational Age (LGA). For infants weighing 4,000 grams or more, mortality rates are higher than for infants weighing between 3,000 and 4,000 grams (6.6 and 8.8 pounds). Large for Gestational Age may be a result of maternal diabetes (which may or may not have been diagnosed before or during pregnancy) and may result in obesity in childhood that may extend into adult life. Very large infants have a higher incidence of birth injuries and congenital anomalies (especially heart disease) and developmental and intellectual retardation. When large for gestational age occurs with pre-term birth, the mortality risk is higher than when either exists alone.

The South Dakota PedNSS population had a high birth weight rate of 9.4 percent in 2003, down from 9.9 percent in 2002. The South Dakota PedNSS population had a high birth weight rate of 9.7 percent over the three-year period 2001-2003. The United States PedNSS population had a high birth weight rate of 7.6 percent in calendar year 2002.

Birth records for calendar year 2003 show that 10.2 percent of live births in South Dakota were high birth weight births.

Figure 4

South Dakota PedNSS
Prevelence of High Birth Weight*
by Race

* >4000 grams, among infants born during the reporting period.

Figure 5

South Dakota PedNSS
Trends in Prevelence of High Birth Weight*
by Race

* >4000 grams, among infants born during the reporting period.
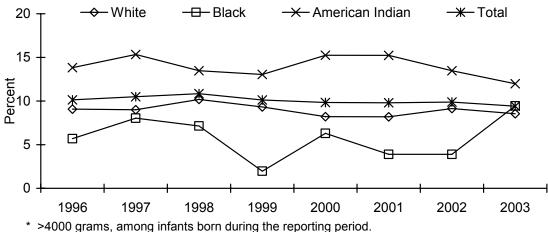
Table 3

Pediatric Nutrition Surveillance System
Low Birth Weight
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Low Birth Weight (1)			Three Year Data (2001-2003) Low Birth Weight (1)		
	Total Records	Percent LBW	Confidence Interval	Total Records	Percent LBW	Confidence Interval
Aurora	**15**	*	*	**46**	*	*
Plankinton	15	*	*	46	*	*
Beadle	**89**	*	*	**318**	**10.1%**	**2.9%**
Huron	89	*	*	318	10.1%	2.9%
Bennett	**42**	*	*	**129**	**0.8%**	**1.3%**
Martin	42	*	*	129	0.8%	1.3%
Bon Homme	**33**	*	*	**91**	*	*
Tyndall	33	*	*	91	*	*
Brookings	**117**	**8.5%**	**4.4%**	**340**	**8.8%**	**2.6%**
Brookings	117	8.5%	4.4%	340	8.8%	2.6%
Brown	**211**	**10.9%**	**3.7%**	**556**	**8.5%**	**2.0%**
Aberdeen	211	10.9%	3.7%	556	8.5%	2.0%
Brule	**18**	*	*	**74**	*	*
Chamberlain	15	*	*	62	*	*
Kimball	3	*	*	12	*	*
Buffalo	**57**	*	*	**164**	**8.5%**	**3.7%**
Ft. Thompson	57	*	*	164	8.5%	3.7%
Butte	**59**	*	*	**203**	**13.3%**	**4.2%**
Belle Fourche	50	*	*	168	13.7%	4.7%
Newell	9	*	*	35	*	*
Charles Mix	**101**	**6.9%**	**4.3%**	**322**	**4.7%**	**2.0%**
Lake Andes	32	*	*	96	*	*
Platte	5	*	*	24	*	*
Wagner	64	*	*	202	4.5%	2.5%
Clark	**12**	*	*	**41**	*	*
Clark	12	*	*	41	*	*
Clay	**65**	*	*	**203**	**5.4%**	**2.7%**
Vermillion	65	*	*	203	5.4%	2.7%
Codington	**172**	**11.6%**	**4.3%**	**479**	**9.6%**	**2.3%**
Watertown	172	11.6%	4.3%	479	9.6%	2.3%
Corson	**1**	*	*	**7**	*	*
McLaughlin	1	*	*	7	*	*
Custer	**26**	*	*	**73**	*	*
Custer	26	*	*	73	*	*
Davison	**127**	**5.5%**	**3.4%**	**352**	**9.4%**	**2.7%**
Mitchell	127	5.5%	3.4%	352	9.4%	2.7%
Day	**27**	*	*	**90**	*	*
Webster	27	*	*	90	*	*
Deuel	**14**	*	*	**35**	*	*
Clear Lake	14	*	*	35	*	*

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
(1) Birth weights less than 2,500 grams, excludes birth weights less than 250 grams.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 3 (Continued)

Pediatric Nutrition Surveillance System
Low Birth Weight
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Low Birth Weight (1)			Three Year Data (2001-2003) Low Birth Weight (1)		
	Total Records	Percent LBW	Confidence Interval	Total Records	Percent LBW	Confidence Interval
Dewey	**18**	*	*	**42**	*	*
Isabel	2	*	*	10	*	*
Timber Lake	16	*	*	32	*	*
Douglas	**14**	*	*	**34**	*	*
Armour	14	*	*	34	*	*
Edmunds	**9**	*	*	**32**	*	*
Bowdle	4	*	*	20	*	*
Ipswich	5	*	*	12	*	*
Fall River	**43**	*	*	**118**	**7.6%**	**4.2%**
Hot Springs	43	*	*	118	7.6%	4.2%
Faulk	**7**	*	*	**22**	*	*
Faulkton	7	*	*	22	*	*
Grant	**40**	*	*	**139**	**7.2%**	**3.7%**
Milbank	40	*	*	139	7.2%	3.7%
Gregory	**23**	*	*	**64**	*	*
Bonesteel	6	*	*	12	*	*
Burke	17	*	*	52	*	*
Haakon	**8**	*	*	**24**	*	*
Philip	8	*	*	24	*	*
Hamlin	**40**	*	*	**99**	*	*
Hayti	40	*	*	99	*	*
Hand	**19**	*	*	**49**	*	*
Miller	19	*	*	49	*	*
Hanson	**15**	*	*	**51**	*	*
Alexandria	15	*	*	51	*	*
Harding	**2**	*	*	**8**	*	*
Buffalo	2	*	*	8	*	*
Hughes	**122**	**6.6%**	**3.8%**	**292**	**6.8%**	**2.5%**
Pierre	122	6.6%	3.8%	292	6.8%	2.5%
Hutchinson	**22**	*	*	**67**	*	*
Freeman	7	*	*	31	*	*
Parkston	15	*	*	36	*	*
Hyde	**6**	*	*	**23**	*	*
Highmore	6	*	*	23	*	*
Jackson	**39**	*	*	**125**	**8.0%**	**4.2%**
Kadoka	6	*	*	21	*	*
Wanblee	33	*	*	104	5.8%	3.9%
Jerauld	**11**	*	*	**21**	*	*
Wessington Springs	11	*	*	21	*	*
Jones	**9**	*	*	**34**	*	*
Murdo	9	*	*	34	*	*

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (1) Birth weights less than 2,500 grams, excludes birth weights less than 250 grams.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
    reliability or precision.

Table 3 (Continued)

Pediatric Nutrition Surveillance System
Low Birth Weight
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Low Birth Weight (1)			Three Year Data (2001-2003) Low Birth Weight (1)		
	Total Records	Percent LBW	Confidence Interval	Total Records	Percent LBW	Confidence Interval
Kingsbury	**7**	*	*	**28**	*	*
De Smet	7	*	*	28	*	*
Lake	**59**	*	*	**151**	**9.3%**	**4.1%**
Madison	59	*	*	151	9.3%	4.1%
Lawrence	**121**	**9.1%**	**4.5%**	**360**	**7.8%**	**2.4%**
Deadwood	34	*	*	116	11.2%	5.1%
Spearfish	87	*	*	244	6.1%	2.6%
Lincoln	**30**	*	*	**89**	*	*
Canton	30	*	*	89	*	*
Lyman	**49**	*	*	**137**	**5.8%**	**3.4%**
Kennebec	9	*	*	22	*	*
Lower Brule	40	*	*	115	4.3%	3.2%
Marshall	**12**	*	*	**31**	*	*
Britton	12	*	*	31	*	*
McCook	**31**	*	*	**67**	*	*
Salem	31	*	*	67	*	*
McPherson	**10**	*	*	**27**	*	*
Eureka	4	*	*	16	*	*
Leola	6	*	*	11	*	*
Meade	**81**	*	*	**242**	**9.1%**	**3.2%**
Faith	11	*	*	28	*	*
Sturgis	70	*	*	214	8.9%	3.4%
Miner	**9**	*	*	**28**	*	*
Howard	9	*	*	28	*	*
Minnehaha	**1,050**	**9.1%**	**1.5%**	**2,890**	**9.0%**	**0.9%**
Sioux Falls - Downtown	59	*	*	762	8.4%	1.7%
Sioux Falls - Eastside	481	9.1%	2.3%	1,019	8.8%	1.5%
Sioux Falls - Westside	510	10.0%	2.3%	1,109	9.6%	1.5%
Moody	**38**	*	*	**98**	*	*
Flandreau	38	*	*	98	*	*
Pennington	**990**	**6.9%**	**1.4%**	**2,864**	**7.5%**	**0.8%**
Ellsworth	142	3.5%	2.6%	403	7.4%	2.2%
Hill City	11	*	*	38	*	*
Rapid City	829	7.6%	1.6%	2,394	7.7%	0.9%
Wall	8	*	*	29	*	*
Perkins	**16**	*	*	**55**	*	*
Bison	2	*	*	16	*	*
Lemmon	14	*	*	39	*	*

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (1) Birth weights less than 2,500 grams, excludes birth weights less than 250 grams.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
    reliability or precision.

Table 3 (Continued)

Pediatric Nutrition Surveillance System
Low Birth Weight
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Low Birth Weight (1)			Three Year Data (2001-2003) Low Birth Weight (1)		
	Total Records	Percent LBW	Confidence Interval	Total Records	Percent LBW	Confidence Interval
Potter	**13**	*	*	**35**	*	*
Hoven	13	*	*	35	*	*
Roberts	**111**	**6.3%**	**3.9%**	**312**	**7.1%**	**2.5%**
Sisseton	111	6.3%	3.9%	312	7.1%	2.5%
Sanborn	**12**	*	*	**36**	*	*
Woonsocket	12	*	*	36	*	*
Shannon	**349**	**8.3%**	**2.5%**	**960**	**7.0%**	**1.4%**
Kyle	87	*	*	242	9.5%	3.3%
Manderson	28	*	*	72	*	*
Pine Ridge	211	8.1%	3.2%	556	6.7%	1.8%
Porcupine	23	*	*	90	*	*
Spink	**33**	*	*	**93**	*	*
Redfield	33	*	*	93	*	*
Stanley	**21**	*	*	**50**	*	*
Ft. Pierre	21	*	*	50	*	*
Sully	**4**	*	*	**10**	*	*
Onida	4	*	*	10	*	*
Tripp	**35**	*	*	**113**	**4.4%**	**3.2%**
Winner	35	*	*	113	4.4%	3.2%
Turner	**24**	*	*	**74**	*	*
Parker	7	*	*	27	*	*
Viborg	17	*	*	47	*	*
Union	**43**	*	*	**138**	**5.8%**	**3.4%**
Elk Point	43	*	*	138	5.8%	3.4%
Walworth	**44**	*	*	**119**	**5.0%**	**3.4%**
Mobridge	39	*	*	111	5.4%	3.6%
Selby	5	*	*	8	*	*
Yankton	**135**	**8.1%**	**4.0%**	**359**	**7.0%**	**2.3%**
Yankton	135	8.1%	4.0%	359	7.0%	2.3%
Ziebach	**8**	*	*	**26**	*	*
Dupree	8	*	*	26	*	*
Healthy People 2010		**5.0%**			**5.0%**	
Statewide PedNSS	**4,968**	**8.0%**	**0.7%**	**14,159**	**8.0%**	**0.4%**
National 2002		**8.9%**			**0.0%**	

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (1) Birth weights less than 2,500 grams, excludes birth weights less than 250 grams.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
    reliability or precision.

Table 4

Pediatric Nutrition Surveillance System
Low Birth Weight
Reporting Period 01/01/2003 to 12/31/2003

Region**	2003 Data Low Birth Weight (1)			Three Year Data (2001-2003) Low Birth Weight (1)		
	Total Records	Percent LBW	Confidence Interval	Total Records	Percent LBW	Confidence Interval
Aberdeen Area	250	9.2%	3.2%	677	8.0%	1.8%
East Central	202	9.4%	3.5%	565	8.1%	2.0%
Huron-Redfield	122	8.2%	4.3%	411	9.0%	2.4%
Mitchell-Chamberlain	198	7.1%	3.1%	580	10.5%	2.2%
Northern Black Hills	202	6.9%	3.0%	602	8.3%	1.9%
Northeast Area	349	8.3%	2.5%	1,006	8.2%	1.5%
North Central	71	*	*	207	5.8%	2.8%
Northwest Area	103	10.7%	5.3%	334	11.1%	3.0%
Oahe Area	185	5.9%	2.9%	459	6.1%	1.9%
Pickstown Area	193	9.3%	3.6%	578	6.9%	1.8%
Pine Ridge Area	430	7.7%	2.2%	1,214	6.4%	1.2%
Rapid City Area	990	6.9%	1.4%	2,864	7.5%	0.8%
Southeast Area	243	7.0%	2.8%	700	6.3%	1.6%
Sioux Falls Area	1,050	9.1%	1.5%	2,890	9.0%	0.9%
Sioux Empire Area	153	7.8%	3.7%	409	9.8%	2.5%
South Central	158	7.0%	3.5%	472	6.1%	1.9%
Southern Black Hills	69	*	*	191	7.9%	3.3%
Healthy People 2010		**5.0%**			**5.0%**	
Statewide PedNSS	**4,968**	**8.9%**	**0.7%**	**14,159**	**8.0%**	**0.4%**
National 2002		**8.9%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (1) Birth weights less than 2,500 grams, excludes birth weights less than 250 grams.
*   Data from regions with less than 100 records per year were not analyzed as the values do not meet standards of reliability
     or precision.
** Counties by regions and regions by county conversion tables are in Appendix A and Appendix B.

Table 5

Pediatric Nutrition Surveillance System
High Birth Weight
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data High Birth Weight (2)			Three Year Data (2001-2003) High Birth Weight (2)		
	Total Records	Percent HBW	Confidence Interval	Total Records	Percent HBW	Confidence Interval
Aurora	**15**	*	*	**46**	*	*
Plankinton	15	*	*	46	*	*
Beadle	**89**	*	*	**318**	**9.1%**	**2.8%**
Huron	89	*	*	318	9.1%	2.8%
Bennett		*	*	**129**	**24.8%**	**7.2%**
Martin		*	*	129	24.8%	7.2%
Bon Homme	**33**	*	*	**91**	*	*
Tyndall	33	*	*	91	*	*
Brookings	**117**	**11.1%**	**5.1%**	**340**	**10.6%**	**2.9%**
Brookings	117	11.1%	5.1%	340	10.6%	2.9%
Brown	**211**	**11.4%**	**3.8%**	**556**	**12.6%**	**2.5%**
Aberdeen	211	11.4%	3.8%	556	12.6%	2.5%
Brule	**18**	*	*	**74**	*	*
Chamberlain	15	*	*	62	*	*
Kimball	3	*	*	12	*	*
Buffalo	**57**	*	*	**164**	**11.6%**	**4.4%**
Ft. Thompson	57	*	*	164	11.6%	4.4%
Butte	**59**	*	*	**203**	**5.9%**	**2.8%**
Belle Fourche	50	*	*	168	4.2%	2.6%
Newell	9	*	*	35	*	*
Charles Mix	**101**	**12.9%**	**5.9%**	**322**	**14.9%**	**3.5%**
Lake Andes	32	*	*	96	*	*
Platte	5	*	*	24	*	*
Wagner	64	*	*	202	12.4%	4.1%
Clark	**12**	*	*	**41**	*	*
Clark	12	*	*	41	*	*
Clay	**65**	*	*	**203**	**14.8%**	**4.4%**
Vermillion	65	*	*	203	14.8%	4.4%
Codington	**172**	**7.6%**	**3.5%**	**479**	**7.1%**	**2.0%**
Watertown	172	7.6%	3.5%	479	7.1%	2.0%
Corson	**1**	*	*	**7**	*	*
McLaughlin	1	*	*	7	*	*
Custer	**26**	*	*	**73**	*	*
Custer	26	*	*	73	*	*
Davison	**127**	**8.7%**	**4.3%**	**352**	**8.2%**	**2.5%**
Mitchell	127	8.7%	4.3%	352	8.2%	2.5%
Day	**27**	*	*	**90**	*	*
Webster	27	*	*	90	*	*
Deuel	**14**	*	*	**35**	*	*
Clear Lake	14	*	*	35	*	*

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (2) Birth weights greater than 4,000 grams, excludes birth weights greater than 6,000 grams.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
     reliability or precision.

Table 5 (Continued)

Pediatric Nutrition Surveillance System
High Birth Weight
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data High Birth Weight (2)			Three Year Data (2001-2003) High Birth Weight (2)		
	Total Records	Percent HBW	Confidence Interval	Total Records	Percent HBW	Confidence Interval
Dewey	**18**	*	*	**42**	*	*
Isabel	2	*	*	10	*	*
Timber Lake	16	*	*	32	*	*
Douglas	**14**	*	*	**34**	*	*
Armour	14	*	*	34	*	*
Edmunds	**9**	*	*	**32**	*	*
Bowdle	4	*	*	20	*	*
Ipswich	5	*	*	12	*	*
Fall River	**43**	*	*	**118**	**4.2%**	**3.1%**
Hot Springs	43	*	*	118	4.2%	3.1%
Faulk	**7**	*	*	**22**	*	*
Faulkton	7	*	*	22	*	*
Grant	**40**	*	*	**139**	**5.8%**	**3.4%**
Milbank	40	*	*	139	5.8%	3.4%
Gregory	**23**	*	*	**64**	*	*
Bonesteel	6	*	*	12	*	*
Burke	17	*	*	52	*	*
Haakon	**8**	*	*	**24**	*	*
Philip	8	*	*	24	*	*
Hamlin	**40**	*	*	**99**	*	*
Hayti	40	*	*	99	*	*
Hand	**19**	*	*	**49**	*	*
Miller	19	*	*	49	*	*
Hanson	**15**	*	*	**51**	*	*
Alexandria	15	*	*	51	*	*
Harding	**2**	*	*	**8**	*	*
Buffalo	2	*	*	8	*	*
Hughes	**122**	**10.7%**	**4.9%**	**292**	**11.3%**	**3.2%**
Pierre	122	10.7%	4.9%	292	11.3%	3.2%
Hutchinson	**22**	*	*	**67**	*	*
Freeman	7	*	*	31	*	*
Parkston	15	*	*	36	*	*
Hyde	**6**	*	*	**23**	*	*
Highmore	6	*	*	23	*	*
Jackson	**39**	*	*	**125**	**25.6%**	**7.4%**
Kadoka	6	*	*	21	*	*
Wanblee	33	*	*	104	26.9%	8.4%
Jerauld	**11**	*	*	**21**	*	*
Wessington Springs	11	*	*	21	*	*
Jones	**9**	*	*	**34**	*	*
Murdo	9	*	*	34	*	*

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (2) Birth weights greater than 4,000 grams, excludes birth weights greater than 6,000 grams.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 5 (Continued)

Pediatric Nutrition Surveillance System
High Birth Weight
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data High Birth Weight (2)			Three Year Data (2001-2003) High Birth Weight (2)		
	Total Records	Percent HBW	Confidence Interval	Total Records	Percent HBW	Confidence Interval
Kingsbury	**7**	*	*	**28**	*	*
De Smet	7	*	*	28	*	*
Lake	**59**	*	*	**151**	**5.3%**	**3.1%**
Madison	59	*	*	151	5.3%	3.1%
Lawrence	**121**	**3.3%**	**2.7%**	**360**	**4.7%**	**1.9%**
Deadwood	34	*	*	116	6.0%	3.7%
Spearfish	87	*	*	244	4.1%	2.1%
Lincoln	**30**	*	*	**89**	*	*
Canton	30	*	*	89	*	*
Lyman	**49**	*	*	**137**	**5.1%**	**3.2%**
Kennebec	9	*	*	22	*	*
Lower Brule	40	*	*	115	6.1%	3.8%
Marshall	**12**	*	*	**31**	*	*
Britton	12	*	*	31	*	*
McCook	**31**	*	*	**67**	*	*
Salem	31	*	*	67	*	*
McPherson	**10**	*	*	**27**	*	*
Eureka	4	*	*	16	*	*
Leola	6	*	*	11	*	*
Meade	**81**	*	*	**242**	**8.3%**	**3.0%**
Faith	11	*	*	28	*	*
Sturgis	70	*	*	214	7.9%	3.2%
Miner	**9**	*	*	**28**	*	*
Howard	9	*	*	28	*	*
Minnehaha	**1,050**	**8.8%**	**1.5%**	**2,890**	**8.6%**	**0.9%**
Sioux Falls - Downtown	59	*	*	762	7.3%	1.6%
Sioux Falls - Eastside	481	6.7%	1.9%	1,019	7.8%	1.4%
Sioux Falls - Westside	510	10.4%	2.3%	1,109	10.3%	1.6%
Moody	**38**	*	*	**98**	*	*
Flandreau	38	*	*	98	*	*
Pennington	**990**	**7.9%**	**1.5%**	**2,864**	**7.8%**	**0.9%**
Ellsworth	142	3.5%	2.6%	403	5.5%	1.9%
Hill City	11	*	*	38	*	*
Rapid City	829	8.7%	1.7%	2,394	8.2%	1.0%
Wall	8	*	*	29	*	*
Perkins	**16**	*	*	**55**	*	*
Bison	2	*	*	16	*	*
Lemmon	14	*	*	39	*	*

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (2) Birth weights greater than 4,000 grams, excludes birth weights greater than 6,000 grams.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
    reliability or precision.

Table 5 (Continued)

Pediatric Nutrition Surveillance System
High Birth Weight
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data High Birth Weight (2)			Three Year Data (2001-2003) High Birth Weight (2)		
	Total Records	Percent HBW	Confidence Interval	Total Records	Percent HBW	Confidence Interval
Potter	**13**	*	*	**35**	*	*
Hoven	13	*	*	35	*	*
Roberts	**111**	**18.0%**	**6.6**	**312**	**16.0%**	**3.7%**
Sisseton	111	18.0%	6.6%	312	16.0%	3.7%
Sanborn	**12**	*	*	**36**	*	*
Woonsocket	12	*	*	36	*	*
Shannon	**349**	**9.7%**	**2.7%**	**960**	**13.1%**	**1.9%**
Kyle	87	*	*	242	16.1%	4.2%
Manderson	28	*	*	72	*	*
Pine Ridge	211	8.5%	3.3%	556	11.3%	2.3%
Porcupine	23	*	*	90	*	*
Spink	**33**	*	*	**93**	*	*
Redfield	33	*	*	93	*	*
Stanley	**21**	*	*	**50**	*	*
Ft. Pierre	21	*	*	50	*	*
Sully	**4**	*	*	**10**	*	*
Onida	4	*	*	10	*	*
Tripp	**35**	*	*	**113**	**7.1%**	**4.1%**
Winner	35	*	*	113	7.1%	4.1%
Turner	**24**	*	*	**74**	*	*
Parker	7	*	*	27	*	*
Viborg	17	*	*	47	*	*
Union	**43**	*	*	**138**	**11.6%**	**4.8%**
Elk Point	43	*	*	138	11.6%	4.8%
Walworth	**44**	*	*	**119**	**11.8%**	**5.2%**
Mobridge	39	*	*	111	11.7%	5.3%
Selby	5	*	*	8	*	*
Yankton	**135**	**14.1%**	**5.3%**	**359**	**11.4%**	**2.9%**
Yankton	135	14.1%	5.3%	359	11.4%	2.9%
Ziebach	**8**	*	*	**26**	*	*
Dupree	8	*	*	26	*	*
Statewide PedNSS	**4,968**	**9.4%**	**0.7%**	**14,159**	**9.7%**	**0.4%**
National 2002		**7.6%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (2) Birth weights greater than 4,000 grams, excludes birth weights greater than 6,000 grams.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
     reliability or precision.

Table 6

Pediatric Nutrition Surveillance System
High Birth Weight
Reporting Period 01/01/2003 to 12/31/2003

Region**	2003 Data High Birth Weight (2)			Three Year Data (2001-2003) High Birth Weight (2)		
	Total Records	Percent HBW	Confidence Interval	Total Records	Percent HBW	Confidence Interval
Aberdeen Area	250	12.0%	3.6%	677	13.1%	2.3%
East Central	202	11.9%	4.0%	565	11.2%	2.3%
Huron-Redfield	122	11.5%	5.1%	411	9.5%	2.5%
Mitchell-Chamberlain	198	8.6%	3.4%	580	8.6%	2.0%
Northern Black Hills	202	4.0%	2.3%	602	6.1%	1.7%
Northeast Area	349	10.6%	2.9%	1,006	9.5%	1.6%
North Central	71	*	*	207	12.1%	4.0%
Northwest Area	103	7.8%	4.5%	334	6.9%	2.4%
Oahe Area	185	9.7%	3.8%	459	11.3%	2.6%
Pickstown Area	193	11.4%	4.0%	578	13.5%	2.5%
Pine Ridge Area	430	11.9%	2.7%	1,214	15.7%	1.9%
Rapid City Area	990	7.9%	1.5%	2,864	7.8%	0.9%
Southeast Area	243	13.2%	3.8%	700	12.4%	2.2%
Sioux Falls Area	1,050	8.8%	1.5%	2,890	8.6%	0.9%
Sioux Empire Area	153	7.2%	3.6%	409	6.6%	2.1%
South Central	158	9.5%	4.0%	472	7.6%	2.1%
Southern Black Hills	69	*	*	191	4.2%	2.4%
Statewide PedNSS	**4,968**	**9.4%**	**0.7%**	**14,159**	**9.7%**	**0.4%**
National 2002		**7.6%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (2) Birth weights greater than 4,000 grams, excludes birth weights greater than 6,000 grams.
* Data from regions with less than 100 records per year were not analyzed as the values do not meet standards of reliability
   or precision.
** Counties by regions and regions by county conversion tables are in Appendix A and Appendix B.

Short Stature

Short stature is defined as a height-for-age below the 5th percentile for children of the same height and age in the reference populations used by the National Center for Health Statistics (NCHS) / CDC. Measurements of height are obtained by recumbent (lying down) measurement in children through 24 months and by upright measurement in children over 24 months.
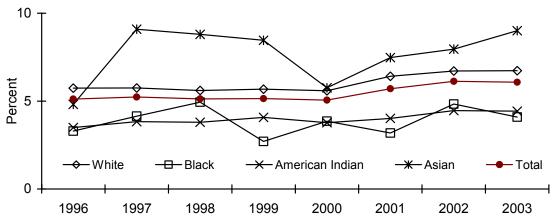
Short stature may be evidence of compromised health, delayed development, and poor diet. Compromised nutrition, and/or infectious and chronic disease may impair full growth potential. The Healthy People 2010 target on pediatric stunting is to "reduce growth retardation among low-income children under 5 years" to 5 percent. The South Dakota rate of short stature among PedNSS records in 2003 was 6.1 percent, the same as it was in 2002. The South Dakota PedNSS population had a short stature rate of 6.0 percent over the three-year period 2001-2003. The United States PedNSS population had a short stature rate of 6.3 percent in calendar year 2002.

Figure 6

South Dakota PedNSS
Prevalence of Short Stature*
Among Children Aged <5 Years, by Race

*   < 5th percentile length or height-for-age, CDC Growth Charts, 2000.
** Reduce growth retardation (short stature) among low-income children under age 5 years to 5%.

Figure 7

South Dakota PedNSS
Trends in Prevalence of Short Stature*
by Race

* < 5th percentile length or height-for-age, CDC Growth Charts, 2000.
Year 2010 target: Reduce growth retardation (short stature) among low-income children under age 5 years to 5%.

The percentage of short stature varied by race in South Dakota's 2003 PedNSS population. The rates were 6.7 percent for whites, 4.1 percent for blacks, 4.4 percent for American Indians or Alaskan Natives, and 9.0 percent for Asian or Pacific Islander. The age breakdown for this population was: less than one year, 9.1 percent, one year, 4.8 percent and 2-4 years of age, 3.9 percent.

Table 7

Pediatric Nutrition Surveillance System
Low Height-for-Age
Reporting Period 01/01/2003 to 12/31/2003

County	2003 Data Low Height-for-Age (3)			Three Year Data (2001-2003) Low Height-for-Age (3)		
Clinic	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aurora	**76**	*	*	**221**	**7.2%**	**3.0%**
Plankinton	76	*	*	221	7.2%	3.0%
Beadle	**445**	**7.9%**	**2.2%**	**1,324**	**8.7%**	**1.3%**
Huron	445	7.9%	2.2%	1,324	8.7%	1.3%
Bennett	**194**	**5.2%**	**2.7%**	**583**	**5.7%**	**1.6%**
Martin	194	5.2%	2.7%	583	5.7%	1.6%
Bon Homme	**166**	**10.2%**	**4.1%**	**453**	**8.4%**	**2.2%**
Tyndall	166	10.2%	4.1%	453	8.4%	2.2%
Brookings	**465**	**4.9%**	**1.7%**	**1,386**	**5.7%**	**1.1%**
Brookings	465	4.9%	1.7%	1,386	5.7%	1.1%
Brown	**760**	**6.6%**	**1.5%**	**2,201**	**5.3%**	**0.8%**
Aberdeen	760	6.6%	1.5%	2,201	5.3%	0.8%
Brule	**120**	**1.7%**	**2.0%**	**382**	**3.7%**	**1.6%**
Chamberlain	97	*	*	320	3.4%	1.7%
Kimball	23	*	*	62	*	*
Buffalo	**237**	**3.4%**	**2.0%**	**647**	**3.9%**	**1.3%**
Ft. Thompson	237	3.4%	2.0%	647	3.9%	1.3%
Butte	**293**	**7.8%**	**2.7%**	**910**	**5.9%**	**1.3%**
Belle Fourche	246	8.1%	3.0%	763	6.6%	1.5%
Newell	47	*	*	147	2.7%	2.2%
Charles Mix	**473**	**3.6%**	**1.4%**	**1,456**	**3.6%**	**0.8%**
Lake Andes	133	2.3%	2.2%	414	3.4%	1.5%
Platte	49	*	*	142	3.5%	2.6%
Wagner	291	4.1%	2.0%	900	3.8%	1.1%
Clark	**70**	*	*	**231**	**6.5%**	**2.8%**
Clark	70	*	*	231	6.5%	2.8%
Clay	**288**	**6.6%**	**2.5%**	**902**	**4.5%**	**1.2%**
Vermillion	288	6.6%	2.5%	902	4.5%	1.2%
Codington	**683**	**5.7%**	**1.5%**	**2,020**	**6.3%**	**0.9%**
Watertown	683	5.7%	1.5%	2,020	6.3%	0.9%
Corson	**14**	*	*	**46**	*	*
McLaughlin	14	*	*	46	*	*
Custer	**106**	**5.7%**	**3.8%**	**319**	**9.1%**	**2.8%**
Custer	106	5.7%	3.8%	319	9.1%	2.8%
Davison	**482**	**6.8%**	**2.0%**	**1,321**	**6.8%**	**1.2%**
Mitchell	482	6.8%	2.0%	1,321	6.8%	1.2%
Day	**162**	**3.7%**	**2.5%**	**507**	**4.1%**	**1.5%**
Webster	162	3.7%	2.5%	507	4.1%	1.5%
Deuel	**58**	*	*	**158**	**4.4%**	**2.7%**
Clear Lake	58	*	*	158	4.4%	2.7%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
(3) Low Height-For-Age: less than 5th percentile based on 2000 CDC growth chart percentiles for length-for-age for children under 2 years of age and height-for-age for children 2 years of age and older, excludes biologically implausible values for height, weight, and age.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 7 (Continued)

Pediatric Nutrition Surveillance System
Low Height-for-Age
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Low Height-for-Age (3)			Three Year Data (2001-2003) Low Height-for-Age (3)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Dewey	**66**	*	*	**192**	**10.4%**	**3.8%**
Isabel	16	*	*	61	*	*
Timber Lake	50	*	*	131	12.2%	5.0%
Douglas	**65**	*	*	**184**	**4.9%**	**2.7%**
Armour	65	*	*	184	4.9%	2.7%
Edmunds	**54**	*	*	**170**	**5.9%**	**3.1%**
Bowdle	37	*	*	122	7.4%	4.1%
Ipswich	17	*	*	48	*	*
Fall River	**182**	**8.2%**	**3.5%**	**574**	**7.5%**	**1.9%**
Hot Springs	182	8.2%	3.5%	574	7.5%	1.9%
Faulk	**40**	*	*	**121**	**2.5%**	**2.4%**
Faulkton	40	*	*	121	2.5%	2.4%
Grant	**181**	**3.3%**	**2.2%**	**531**	**5.1%**	**1.6%**
Milbank	181	3.3%	2.2%	531	5.1%	1.6%
Gregory	**110**	**7.3%**	**4.2%**	**316**	**7.0%**	**2.4%**
Bonesteel	25	*	*	87	*	*
Burke	85	*	*	229	6.6%	2.8%
Haakon	**47**	*	*	**149**	**4.7%**	**2.9%**
Philip	47	*	*	149	4.7%	2.9%
Hamlin	**166**	**12.0%**	**4.4%**	**452**	**9.5%**	**2.4%**
Hayti	166	12.0%	4.4%	452	9.5%	2.4%
Hand	**77**	*	*	**254**	**5.1%**	**2.3%**
Miller	77	*	*	254	5.1%	2.3%
Hanson	**82**	*	*	**240**	**5.0%**	**2.4%**
Alexandria	82	*	*	240	5.0%	2.4%
Harding	**13**	*	*	**40**	*	*
Buffalo	13	*	*	40	*	*
Hughes	**417**	**7.7%**	**2.2%**	**1,114**	**5.5%**	**1.2%**
Pierre	417	7.7%	2.2%	1,114	5.5%	1.2%
Hutchinson	**115**	**12.2%**	**5.4%**	**317**	**8.8%**	**2.7%**
Freeman	54	*	*	138	10.9%	4.6%
Parkston	61	*	*	179	7.3%	3.3%
Hyde	**49**	*	*	**129**	**5.4%**	**3.4%**
Highmore	49	*	*	129	5.4%	3.4%
Jackson	**217**	**3.2%**	**2.0%**	**638**	**3.6%**	**1.2%**
Kadoka	48	*	*	158	6.3%	3.3%
Wanblee	169	3.6%	2.4%	480	2.7%	1.2%
Jerauld	**37**	*	*	**84**	*	*
Wessington Springs	37	*	*	84	*	*
Jones	**45**	*	*	**165**	**4.2%**	**2.6%**
Murdo	45	*	*	165	4.2%	2.6%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.

(3) Low Height-For-Age: less than 5th percentile based on 2000 CDC growth chart percentiles for length-for-age for children under 2 years of age and height-for-age for children 2 years of age and older, excludes biologically implausible values for height, weight, and age.

* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 7 (Continued)

Pediatric Nutrition Surveillance System
Low Height-for-Age
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Low Height-for-Age (3)			Three Year Data (2001-2003) Low Height-for-Age (3)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Kingsbury	**47**	*	*	**148**	**8.1%**	**3.8%**
De Smet	47	*	*	148	8.1%	3.8%
Lake	**205**	**7.3%**	**3.1%**	**590**	**8.1%**	**1.9%**
Madison	205	7.3%	3.1%	590	8.1%	1.9%
Lawrence	**446**	**7.8%**	**2.2%**	**1,281**	**7.7%**	**1.3%**
Deadwood	147	6.8%	3.5%	415	8.0%	2.3%
Spearfish	299	8.4%	2.8%	866	7.6%	1.5%
Lincoln	**133**	**6.8%**	**3.7%**	**378**	**6.1%**	**2.1%***
Canton	133	6.8%	3.7%	378	6.1%	2.1%
Lyman	**241**	**5.4%**	**2.5%**	**691**	**5.4%**	**1.5%**
Kennebec	44	*	*	122	7.4%	4.1%
Lower Brule	197	5.6%	2.8%	569	4.9%	1.5%
Marshall	**51**	*	*	**162**	**3.7%**	**2.5%**
Britton	51	*	*	162	3.7%	2.5%
McCook	**110**	**10.0%**	**5.0%**	**327**	**9.2%**	**2.8%**
Salem	110	10.0%	5.0%	327	9.2%	2.8%
McPherson	**45**	*	*	**131**	**3.8%**	**2.8%**
Eureka	22	*	*	75	*	*
Leola	23	*	*	56	*	*
Meade	**399**	**4.0%**	**1.6%**	**1,165**	**5.1%**	**1.1%**
Faith	53	*	*	147	2.7%	2.2%
Sturgis	346	4.6%	1.9%	1,018	5.4%	1.2%
Miner	**44**	*	*	**124**	**6.5%**	**3.8%**
Howard	44	*	*	124	6.5%	3.8%
Minnehaha	**3,500**	**6.5%**	**0.7%**	**9,819**	**6.5%**	**0.4%**
Sioux Falls - Downtown	211	3.3%	2.1%	2,663	5.5%	0.7%
Sioux Falls - Eastside	1,611	5.7%	1.0%	3,471	5.7%	0.7%
Sioux Falls - Westside	1,678	7.7%	1.1%	3,685	8.0%	0.8%
Moody	**146**	**5.5%**	**3.2%**	**386**	**7.0%**	**2.2%**
Flandreau	146	5.5%	3.2%	386	7.0%	2.2%
Pennington	**3,816**	**6.8%**	**0.7%**	**10,925**	**6.6%**	**0.4%**
Ellsworth	525	4.8%	1.6%	1,582	6.4%	1.0%
Hill City	66	*	*	174	4.6%	2.7%
Rapid City	3,191	7.1%	0.8%	9,047	6.7%	0.4%
Wall	34	*	*	122	4.9%	3.3%
Perkins	**110**	**4.5%**	**3.3%**	**342**	**4.1%**	**1.8%**
Bison	32	*	*	105	6.7%	4.2%
Lemmon	78	*	*	237	3.0%	1.9%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
(3) Low Height-For-Age: less than 5th percentile based on 2000 CDC growth chart percentiles for length-for-age for children under 2 years of age and height-for-age for children 2 years of age and older, excludes biologically implausible values for height, weight, and age.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 7 (Continued)

Pediatric Nutrition Surveillance System
Low Height-for-Age
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Low Height-for-Age (3)			Three Year Data (2001-2003) Low Height-for-Age (3)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Potter	**57**	*	*	**165**	**3.0%**	**2.2%**
Hoven	57	*	*	165	3.0%	2.2%
Roberts	**435**	**2.8%**	**1.3%**	**1,316**	**3.3%**	**0.8%**
Sisseton	435	2.8%	1.3%	1,316	3.3%	0.8%
Sanborn	**48**	*	*	**151**	**9.9%**	**4.2%**
Woonsocket	48	*	*	151	9.9%	4.2%
Shannon	**1,294**	**4.2%**	**0.9%**	**3,783**	**3.7%**	**0.5%**
Kyle	340	3.5%	1.7%	1,057	3.9%	1.0%
Manderson	92	*	*	266	3.0%	1.7%
Pine Ridge	732	4.4%	1.3%	2,037	3.8%	0.7%
Porcupine	130	4.6%	3.1%	423	3.1%	1.4%
Spink	**133**	**2.3%**	**2.2%**	**397**	**4.5%**	**1.8%**
Redfield	133	2.3%	2.2%	397	4.5%	1.8%
Stanley	**114**	**7.0%**	**4.1%**	**261**	**7.3%**	**2.8%**
Ft. Pierre	114	7.0%	4.1%	261	7.3%	2.8%
Sully	**19**	*	*	**47**	*	*
Onida	19	*	*	47	*	*
Tripp	**165**	**4.8%**	**2.8%**	**476**	**5.9%**	**1.8%**
Winner	165	4.8%	2.8%	476	5.9%	1.8%
Turner	**99**	*	*	**297**	**3.4%**	**1.8%**
Parker	36	*	*	108	5.6%	3.7%
Viborg	63	*	*	189	2.1%	1.7%
Union	**139**	**4.3%**	**2.9%**	**432**	**5.6%**	**1.9%**
Elk Point	139	4.3%	2.9%	432	5.6%	1.9%
Walworth	**180**	**2.8%**	**2.1%**	**550**	**4.9%**	**1.6%**
Mobridge	160	2.5%	2.1%	509	5.1%	1.6%
Selby	20	*	*	41	*	*
Yankton	**504**	**7.3%**	**2.0%**	**1,439**	**7.2%**	**1.2%**
Yankton	504	7.3%	2.0%	1,439	7.2%	1.2%
Ziebach	**43**	*	*	**148**	**2.0%**	**1.9%**
Dupree	43	*	*	148	2.0%	1.9%
Statewide PedNSS	**19,578**	**6.1%**	**0.3%**	**56,668**	**6.0%**	**0.2%**
National 2002		**6.3%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (3) Low Height-For-Age: less than 5th percentile based on 2000 CDC growth chart percentiles for length-for-age for children under 2 years of age and height-for-age for children 2 years of age and older, excludes biologically implausible values for height, weight, and age
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 8

Pediatric Nutrition Surveillance System
Low Height-for-Age
Reporting Period 01/01/2003 to 12/31/2003

Region**	2003 Data Low Height-for-Age (3)			Three Year Data (2001-2003) Low Height-for-Age (3)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aberdeen Area	973	6.1%	1.3%	2,870	5.0%	0.7%
East Central	824	6.4%	1.4%	2,372	6.8%	0.9%
Huron-Redfield	578	6.6%	1.8%	1,721	7.7%	1.1%
Mitchell-Chamberlain	845	6.2%	1.4%	2,399	6.5%	0.9%
Northern Black Hills	845	6.0%	1.4%	2,446	6.5%	0.8%
Northeast Area	1,427	4.3%	0.9%	4,256	5.2%	0.6%
North Central	333	3.0%	1.6%	1,018	4.5%	1.1%
Northwest Area	525	7.8%	2.0%	1,632	5.7%	1.0%
Oahe Area	733	6.5%	1.5%	1,970	5.3%	0.9%
Pickstown Area	929	6.1%	1.3%	2,726	5.5%	0.7%
Pine Ridge Area	1,705	4.2%	0.8%	5,004	3.9%	0.5%
Rapid City Area	3,816	6.8%	0.7%	10,925	6.6%	0.4%
Southeast Area	931	6.7%	1.4%	2,773	6.1%	0.8%
Sioux Falls Area	3,500	6.5%	0.7%	9,819	6.5%	0.4%
Sioux Empire Area	591	7.1%	1.8%	1,716	6.9%	1.0%
South Central	735	4.9%	1.3%	2,128	4.9%	0.8%
Southern Black Hills	288	7.3%	2.6%	893	8.1%	1.6%
Statewide PedNSS	**19,578**	**6.1%**	**0.3%**	**56,668**	**6.0%**	**0.2%**
National 2002		**6.3%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.

(3) Low Height-For-Age: less than 5th percentile based on 2000 CDC growth chart percentiles for length-for-age for children under 2 years of age and height-for-age for children 2 years of age and older, excludes biologically implausible values for height, weight, and age

** Counties by regions and regions by county conversion tables are in Appendix A and Appendix B.

Underweight/Overweight (Children less than 5 years of age)

Children up to age 2 years and infants falling below the 5th percentile in weight for height, compared to children of the same sex and age in the CDC reference population, are considered to be underweight. Children 2 years and older whose BMI-for-age falls below the 5th percentile are considered to be underweight. The conditions contributing to the higher percentage of low weight-for-height are inadequate dietary intake, failure to thrive, chronic and infectious diseases, and other normal variations within a population.
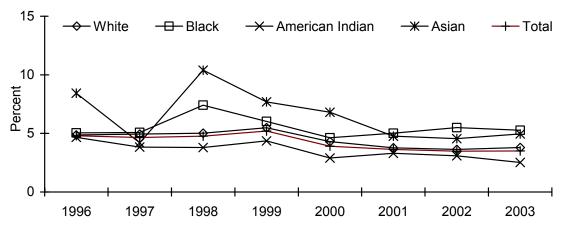
The percent prevalence of underweight infants and children was 3.5 percent in the South Dakota PedNSS data for 2003, the same as it was in 2002. The South Dakota PedNSS population had a low weight-for-height rate of 3.5 percent over the three-year period 2001-2003. The United States PedNSS population had a low weight-for-height rate of 5.4 percent in calendar year 2002.

The percent prevalence of underweight children by race in South Dakota's 2003 PedNSS population was 3.8 percent for whites, 5.3 percent for blacks, 2.5 for American Indians and Alaskan Natives, and 5.0 percent for Asian or Pacific Islanders. The age breakdown for this population was: less than one year, 4.7 percent, one year, 2.9 percent and 2-4 years of age, 2.7 percent.

Figure 8

South Dakota PedNSS
Prevalence of Under Weight*
Among Children Aged <5 Years, by Race

* < 5th percentile weight-for-length or BMI-for-age, CDC Growth Charts, 2000.
    5% of children are expected to fall below the 5th percentile.

Figure 9

South Dakota PedNSS
Trends in Prevalence of Underweight*
by Race

* < 5th percentile weight-for-length or BMI-for-age, CDC Growth Charts, 2000.
  5% of children are expected to fall below the 5th percentile.

Children up to age 2 years and infants falling at the 95th percentile and above, compared to children of the same sex and age in the CDC reference population, are considered to be overweight. Children 2 years and older whose BMI-for-age falls at the 95th percentile and above are considered to be overweight.

The percent prevalence of overweight children by race in South Dakota's 2003 PedNSS population was 10.6 percent for whites, 13.3 percent for blacks, 18.1 for American Indians and Alaskan Natives, and 9.5 percent for Asian or Pacific Islanders. The age breakdown for this population was: less than one year, 9.8 percent, one year, 16.6 percent and 2-4 years of age, 13.6 percent.

Figure 10

South Dakota PedNSS
Prevalence of Overweight*
Among Children Aged <5 Years, by Race

* > 95th percentile weight-for-length or BMI-for-age, CDC Growth Charts, 2000.
  5% of children are expected to fall above the 95th percentile.
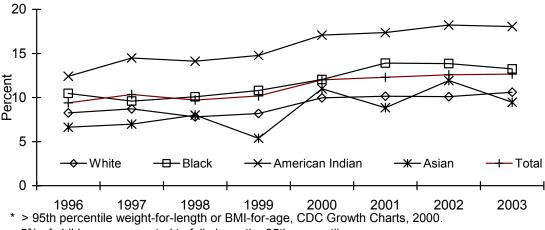
Figure 11

South Dakota PedNSS
Trends in Prevalence of Overweight*
Among Children Aged <5 Years, by Race

* > 95th percentile weight-for-length or BMI-for-age, CDC Growth Charts, 2000.
  5% of children are expected to fall above the 95th percentile.

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Table 9

Pediatric Nutrition Surveillance System
Low Weight-for-Height
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Low Weight-for-Height (4)			Three Year Data (2001-2003) Low Weight-for-Height (4)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aurora	**76**	*	*	**221**	**1.8%**	**1.5%**
Plankinton	76	*	*	221	1.8%	1.5%
Beadle	**445**	**3.4%**	**1.4%**	**1,324**	**4.8%**	**1.0%**
Huron	445	3.4%	1.4%	1,324	4.8%	1.0%
Bennett	**194**	**2.6%**	**1.9%**	**583**	**2.1%**	**1.0%**
Martin	194	2.6%	1.9%	583	2.1%	1.0%
Bon Homme	**166**	**4.8%**	**2.8%**	**453**	**4.0%**	**1.5%**
Tyndall	166	4.8%	2.8%	453	4.0%	1.5%
Brookings	**465**	**1.9%**	**1.1%**	**1,386**	**2.7%**	**0.7%**
Brookings	465	1.9%	1.1%	1,386	2.7%	0.7%
Brown	**760**	**4.5%**	**1.3%**	**2,201**	**4.2%**	**0.7%**
Aberdeen	760	4.5%	1.3%	2,201	4.2%	0.7%
Brule	**120**	**5.0%**	**3.4%**	**382**	**2.6%**	**1.4%**
Chamberlain	97	*	*	320	2.2%	1.4%
Kimball	23	*	*	62	*	*
Buffalo	**237**	**0.8%**	**1.0%**	**647**	**2.2%**	**1.0%**
Ft. Thompson	237	0.8%	1.0%	647	2.2%	1.0%
Butte	**293**	**6.1%**	**2.4%**	**910**	**5.7%**	**1.3%**
Belle Fourche	246	4.1%	2.1%	763	3.9%	1.2%
Newell	47	*	*	147	15.0%	5.3%
Charles Mix	**473**	**2.5%**	**1.2%**	**1,456**	**2.1%**	**0.6%**
Lake Andes	133	3.0%	2.5%	414	1.7%	1.1%
Platte	49	*	*	142	2.8%	2.3%
Wagner	291	2.4%	1.5%	900	2.2%	0.8%
Clark	**70**	*	*	**231**	**3.5%**	**2.0%**
Clark	70	*	*	231	3.5%	2.0%
Clay	**288**	**5.9%**	**2.4%**	**902**	**4.1%**	**1.1%**
Vermillion	288	5.9%	2.4%	902	4.1%	1.1%
Codington	**683**	**3.2%**	**1.1%**	**2,020**	**3.4%**	**0.7%**
Watertown	683	3.2%	1.1%	2,020	3.4%	0.7%
Corson	**14**	*	*	**46**	*	*
McLaughlin	14	*	*	46	*	*
Custer	**106**	**0.9%**	**1.5%**	**319**	**1.3%**	**1.1%**
Custer	106	0.9%	1.5%	319	1.3%	1.1%
Davison	**482**	**3.5%**	**1.4%**	**1,321**	**3.6%**	**0.9%**
Mitchell	482	3.5%	1.4%	1,321	3.6%	0.9%
Day	**162**	**2.5%**	**2.0%**	**507**	**2.4%**	**1.1%**
Webster	162	2.5%	2.0%	507	2.4%	1.1%
Deuel	**58**	*	*	**158**	**3.2%**	**2.3%**
Clear Lake	58	*	*	158	3.2%	2.3%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (4) Low Weight-For-Height: less than 5th percentile based on 2000 CDC growth chart percentiles for weight-for-length for children under 2 years of age and height-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.
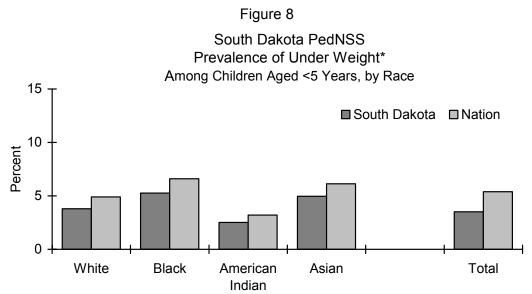 *   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 9 (Continued)

Pediatric Nutrition Surveillance System
Low Weight-for-Height
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Low Weight-for-Height (4)			Three Year Data (2001-2003) Low Weight-for-Height (4)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Dewey	**66**	*	*	**192**	**5.2%**	**2.7%**
Isabel	16	*	*	61	*	*
Timber Lake	50	*	*	131	5.3%	3.3%
Douglas	**65**	*	*	**184**	**3.8%**	**2.4%**
Armour	65	*	*	184	3.8%	2.4%
Edmunds	**54**	*	*	**170**	**2.9%**	**2.1%**
Bowdle	37	*	*	122	3.3%	2.7%
Ipswich	17	*	*	48	*	*
Fall River	**182**	**4.4%**	**2.6%**	**574**	**2.6%**	**1.1%**
Hot Springs	182	4.4%	2.6%	574	2.6%	1.1%
Faulk	**40**	*	*	**121**	**3.3%**	**2.7%**
Faulkton	40	*	*	121	3.3%	2.7%
Grant	**181**	**5.5%**	**2.9%**	**531**	**3.8%**	**1.4%**
Milbank	181	5.5%	2.9%	531	3.8%	1.4%
Gregory	**110**	**1.8%**	**2.1%**	**316**	**2.8%**	**1.5%**
Bonesteel	25	*	*	87	*	*
Burke	85	*	*	229	3.5%	2.0%
Haakon	**47**	*	*	**149**	**2.7%**	**2.2%**
Philip	47	*	*	149	2.7%	2.2%
Hamlin	**166**	**1.8%**	**1.7%**	**452**	**1.5%**	**0.9%**
Hayti	166	1.8%	1.7%	452	1.5%	0.9%
Hand	**77**	*	*	**254**	**2.8%**	**1.7%**
Miller	77	*	*	254	2.8%	1.7%
Hanson	**82**	*	*	**240**	**6.3%**	**2.7%**
Alexandria	82	*	*	240	6.3%	2.7%
Harding	**13**	*	*	**40**	*	*
Buffalo	13	*	*	40	*	*
Hughes	**417**	**2.2%**	**1.2%**	**1,114**	**1.7%**	**0.6%**
Pierre	417	2.2%	1.2%	1,114	1.7%	0.6%
Hutchinson	**115**	**5.2%**	**3.5%**	**317**	**5.7%**	**2.2%**
Freeman	54	*	*	138	2.9%	2.4%
Parkston	61	*	*	179	7.8%	3.4%
Hyde	**49**	*	*	**129**	**1.6%**	**1.8%**
Highmore	49	*	*	129	1.6%	1.8%
Jackson	**217**	**0.9%**	**1.1%**	**638**	**2.0%**	**0.9%**
Kadoka	48	*	*	158	3.2%	2.3%
Wanblee	169	0.6%	1.0%	480	1.7%	1.0%
Jerauld	**37**	*	*	**84**	*	*
Wessington Springs	37	*	*	84	*	*
Jones	**45**	*	*	**165**	**3.0%**	**2.2%**
Murdo	45	*	*	165	3.0%	2.2%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (4) Low Weight-For-Height: less than 5th percentile based on 2000 CDC growth chart percentiles for weight-for-length for
   children under 2 years of age and height-for-age for children 2 years of age and older; excludes records with biologically
   implausible values for height, age, and weight.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
   reliability or precision.

Table 9 (Continued)

Pediatric Nutrition Surveillance System
Low Weight-for-Height
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Low Weight-for-Height (4)			Three Year Data (2001-2003) Low Weight-for-Height (4)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Kingsbury	**47**	*	*	**148**	**4.7%**	**2.9%**
De Smet	47	*	*	148	4.7%	2.9%
Lake	**205**	**2.9%**	**2.0%**	**590**	**2.7%**	**1.1%**
Madison	205	2.9%	2.0%	590	2.7%	1.1%
Lawrence	**446**	**4.5%**	**1.7%**	**1,281**	**6.6%**	**1.2%**
Deadwood	147	5.4%	3.2%	415	4.8%	1.8%
Spearfish	299	4.0%	1.9%	866	7.4%	1.5%
Lincoln	**133**	**3.8%**	**2.8%**	**378**	**2.1%**	**1.2%**
Canton	133	3.8%	2.8%	378	2.1%	1.2%
Lyman	**241**	**2.9%**	**1.8%**	**691**	**1.6%**	**0.8%**
Kennebec	44	*	*	122	2.5%	2.4%
Lower Brule	197	2.0%	1.7%	569	1.4%	0.8%
Marshall	**51**	*	*	**162**	**4.9%**	**2.9%**
Britton	51	*	*	162	4.9%	2.9%
McCook	**110**	**1.8%**	**2.1%**	**327**	**1.2%**	**1.0%**
Salem	110	1.8%	2.1%	327	1.2%	1.0%
McPherson	**45**	*	*	**131**	**3.8%**	**2.8%**
Eureka	22	*	*	75	*	*
Leola	23	*	*	56	*	*
Meade	**399**	**2.5%**	**1.3%**	**1,165**	**2.2%**	**0.7%**
Faith	53	*	*	147	1.4%	1.6%
Sturgis	346	2.9%	1.5%	1,018	2.4%	0.8%
Miner	**44**	*	*	**124**	**5.6%**	**3.5%**
Howard	44	*	*	124	5.6%	3.5%
Minnehaha	**3,500**	**3.7%**	**0.5%**	**9,819**	**3.4%**	**0.3%**
Sioux Falls - Downtown	211	3.8%	2.2%	2,663	4.0%	0.6%
Sioux Falls - Eastside	1,611	4.0%	0.8%	3,471	3.2%	0.5%
Sioux Falls - Westside	1,678	3.4%	0.7%	3,685	3.1%	0.5%
Moody	**146**	**2.7%**	**2.2%**	**386**	**1.6%**	**1.1%**
Flandreau	146	2.7%	2.2%	386	1.6%	1.1%
Pennington	**3,816**	**3.7%**	**0.5%**	**10,925**	**4.0%**	**0.3%**
Ellsworth	525	4.6%	1.5%	1,582	5.4%	1.0%
Hill City	66	*	*	174	3.4%	2.3%
Rapid City	3,191	3.6%	0.6%	9,047	3.7%	0.3%
Wall	34	*	*	122	6.6%	3.8%
Perkins	**110**	**0.9%**	**1.5%**	**342**	**2.0%**	**1.3%**
Bison	32	*	*	105	1.9%	2.2%
Lemmon	78	*	*	237	2.1%	1.5%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.

(4) Low Weight-For-Height: less than 5th percentile based on 2000 CDC growth chart percentiles for weight-for-length for children under 2 years of age and height-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.

* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 9 (Continued)

Pediatric Nutrition Surveillance System
Low Weight-for-Height
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Low Weight-for-Height (4)			Three Year Data (2001-2003) Low Weight-for-Height (4)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Potter	**57**	*	*	**165**	**1.8%**	**1.7%**
Hoven	57	*	*	165	1.8%	1.7%
Roberts	**435**	**3.0%**	**1.4%**	**1,316**	**2.5%**	**0.7%**
Sisseton	435	3.0%	1.4%	1,316	2.5%	0.7%
Sanborn	**48**	*	*	**151**	**2.0%**	**1.9%**
Woonsocket	48	*	*	151	2.0%	1.9%
Shannon	**1,294**	**3.9%**	**0.9%**	**3,783**	**5.4%**	**0.6%**
Kyle	340	2.1%	1.3%	1,057	1.8%	0.7%
Manderson	92	*	*	266	5.3%	2.3%
Pine Ridge	732	4.0%	1.2%	2,037	6.9%	1.0%
Porcupine	130	7.7%	4.0%	423	7.6%	2.2%
Spink	**133**	**4.5%**	**3.0%**	**397**	**3.5%**	**1.5%**
Redfield	133	4.5%	3.0%	397	3.5%	1.5%
Stanley	**114**	**2.6%**	**2.5%**	**261**	**1.9%**	**1.4%**
Ft. Pierre	114	2.6%	2.5%	261	1.9%	1.4%
Sully	**19**	*	*	**47**	*	*
Onida	19	*	*	47	*	*
Tripp	**165**	**4.8%**	**2.8%**	**476**	**2.7%**	**1.2%**
Winner	165	4.8%	2.8%	476	2.7%	1.2%
Turner	**99**	*	*	**297**	**2.4%**	**1.5%**
Parker	36	*	*	108	2.8%	2.6%
Viborg	63	*	*	189	2.1%	1.7%
Union	**139**	**4.3%**	**2.9%**	**432**	**3.9%**	**1.6%**
Elk Point	139	4.3%	2.9%	432	3.9%	1.6%
Walworth	**180**	**2.2%**	**1.8%**	**550**	**2.5%**	**1.1%**
Mobridge	160	2.5%	2.1%	509	2.8%	1.2%
Selby	20	*	*	41	*	*
Yankton	**504**	**2.6%**	**1.2%**	**1,439**	**3.3%**	**0.8%**
Yankton	504	2.6%	1.2%	1,439	3.3%	0.8%
Ziebach	**43**	*	*	**148**	**4.1%**	**2.7%**
Dupree	43	*	*	148	4.1%	2.7%
Statewide PedNSS	**18,801**	**3.5%**	**0.2%**	**56,668**	**3.5%**	**0.1%**
National 2002		**5.4%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (4) Low Weight-For-Height: less than 5th percentile based on 2000 CDC growth chart percentiles for weight-for-length for children under 2 years of age and height-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.
 * Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 10 (Continued)

Pediatric Nutrition Surveillance System
Low Weight-for-Height
Reporting Period 01/01/2003 to 12/31/2003

Region**	2003 Data Low Weight-for-Height (4)			Three Year Data (2001-2003) Low Weight-for-Height (4)		
	Total Records	Percent	Confidence 1.1%	Total Records	Percent	Confidence Interval
Aberdeen Area	973	4.1%	1.1%	2,870	3.9%	0.6%
East Central	824	2.3%	0.9%	2,372	2.4%	0.5%
Huron-Redfield	578	3.6%	1.3%	1,721	4.5%	0.8%
Mitchell-Chamberlain	845	3.9%	1.1%	2,399	3.4%	0.6%
Northern Black Hills	845	3.6%	1.1%	2,446	4.5%	0.7%
Northeast Area	1,427	3.4%	0.8%	4,256	3.1%	0.4%
North Central	333	3.0%	1.6%	1,018	2.8%	0.9%
Northwest Area	525	4.4%	1.5%	1,632	4.7%	0.9%
Oahe Area	733	2.5%	1.0%	1,970	1.9%	0.5%
Pickstown Area	929	3.4%	1.0%	2,726	3.0%	0.5%
Pine Ridge Area	1,705	3.3%	0.7%	5,004	4.6%	0.5%
Rapid City Area	3,816	3.7%	0.5%	10,925	4.0%	0.3%
Southeast Area	931	3.9%	1.1%	2,773	3.6%	0.6%
Sioux Falls Area	3,500	3.7%	0.5%	9,819	3.4%	0.3%
Sioux Empire Area	591	3.0%	1.2%	1,716	2.4%	0.6%
South Central	735	2.9%	1.0%	2,128	2.2%	0.5%
Southern Black Hills	288	3.1%	1.7%	893	2.1%	0.8%
Statewide PedNSS	**19,578**	**3.5%**	**0.2%**	**56,668**	**3.5%**	**0.1%**
National 2002		**5.4%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (4) Low Weight-For-Height: less than 5th percentile based on 2000 CDC growth chart percentiles for weight-for-length for
    children under 2 years of age and height-for-age for children 2 years of age and older; excludes records with biologically
    implausible values for height, age, and weight.
** Counties by regions and regions by county conversion tables are in Appendix A and Appendix B.

Table 11

Pediatric Nutrition Surveillance System
High Weight-for-Height
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data High Weight-for-Height (5)			Three Year Data (2001-2003) High Weight-for-Height (5)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aurora	**76**	*	*	**221**	**13.6%**	**4.1%**
Plankinton	76	*	*	221	13.6%	4.1%
Beadle	**445**	**10.3%**	**2.5%**	**1,324**	**10.4%**	**1.5%**
Huron	445	10.3%	2.5%	1,324	10.4%	1.5%
Bennett	**194**	**20.6%**	**5.4%**	**583**	**23.2%**	**3.3%**
Martin	194	20.6%	5.4%	583	23.2%	3.3%
Bon Homme	**166**	**15.1%**	**5.0%**	**453**	**12.4%**	**2.7%**
Tyndall	166	15.1%	5.0%	453	12.4%	2.7%
Brookings	**465**	**8.6%**	**2.2%**	**1,386**	**9.7%**	**1.4%**
Brookings	465	8.6%	2.2%	1,386	9.7%	1.4%
Brown	**760**	**12.1%**	**2.1%**	**2,201**	**12.0%**	**1.2%**
Aberdeen	760	12.1%	2.1%	2,201	12.0%	1.2%
Brule	**120**	**11.7%**	**5.1%**	**382**	**14.4%**	**3.2%**
Chamberlain	97	*	*	320	14.7%	3.5%
Kimball	23	*	*	62	*	*
Buffalo	**237**	**23.3%**	**5.2%**	**647**	**21.2%**	**3.0%**
Ft. Thompson	237	23.3%	5.2%	647	21.2%	3.0%
Butte	**293**	**11.3%**	**3.2%**	**910**	**11.6%**	**1.9%**
Belle Fourche	246	11.8%	3.6%	763	12.6%	2.1%
Newell	47	*	*	147	6.8%	3.5%
Charles Mix	**473**	**15.4%**	**3.0%**	**1,456**	**18.1%**	**1.8%**
Lake Andes	133	14.3%	5.4%	414	18.4%	3.5%
Platte	49	*	*	142	8.5%	4.0%
Wagner	291	17.9%	4.1%	900	19.6%	2.4%
Clark	**70**	*	*	**231**	**9.1%**	**3.3%**
Clark	70	*	*	231	9.1%	3.3%
Clay	**288**	**9.0%**	**2.9%**	**902**	**10.5%**	**1.8%**
Vermillion	288	9.0%	2.9%	902	10.5%	1.8%
Codington	**683**	**13.5%**	**2.3%**	**2,020**	**12.6%**	**1.3%**
Watertown	683	13.5%	2.3%	2,020	12.6%	1.3%
Corson	**14**	*	*	**46**	*	*
McLaughlin	14	*	*	46	*	*
Custer	**106**	**8.5%**	**4.7%**	**319**	**9.4%**	**2.8%**
Custer	106	8.5%	4.7%	319	9.4%	2.8%
Davison	**482**	**11.6%**	**2.6%**	**1,321**	**11.0%**	**1.5%**
Mitchell	482	11.6%	2.6%	1,321	11.0%	1.5%
Day	**162**	**12.3%**	**4.5%**	**507**	**11.0%**	**2.4%**
Webster	162	12.3%	4.5%	507	11.0%	2.4%
Deuel	**58**	*	*	**158**	**11.4%**	**4.4%**
Clear Lake	58	*	*	158	11.4%	4.4%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.

(5) High Weight-For-Height: greater than or equal to 95th percentile based on 2000 CDC growth chart percentiles for weight-for-length for children under 2 years of age and BMI-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.

* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 11 (Continued)

Pediatric Nutrition Surveillance System
High Weight-for-Height
Reporting Period 01/01/2003 to 12/31/2003

County	2003 Data High Weight-for-Height (5)			Three Year Data (2001-2003) High Weight-for-Height (5)		
Clinic	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Dewey	**66**	*	*	**192**	**10.9%**	**3.9%**
Isabel	16	*	*	61	*	*
Timber Lake	50	*	*	131	11.5%	4.9%
Douglas	**65**	*	*	**184**	**12.5%**	**4.3%**
Armour	65	*	*	184	12.5%	4.3%
Edmunds	**54**	*	*	**170**	**11.8%**	**4.3%**
Bowdle	37	*	*	122	12.3%	5.2%
Ipswich	17	8.0%	11.3%	48	*	*
Fall River	**182**	**14.8%**	**4.7%**	**574**	**14.1%**	**2.6%**
Hot Springs	182	14.8%	4.7%	574	14.1%	2.6%
Faulk	**40**	*	*	**121**	**13.2%**	**5.4%**
Faulkton	40	*	*	121	13.2%	5.4%
Grant	**181**	**11.0%**	**4.1%**	**531**	**15.1%**	**2.8%**
Milbank	181	11.0%	4.1%	531	15.1%	2.8%
Gregory	**110**	**8.2%**	**4.5%**	**316**	**8.5%**	**2.7%**
Bonesteel	25	*	*	87	*	*
Burke	85	*	*	229	6.1%	2.7%
Haakon	**47**	*	*	**149**	**13.4%**	**4.9%**
Philip	47	*	*	149	13.4%	4.9%
Hamlin	**166**	**7.8%**	**3.6%**	**452**	**8.4%**	**2.2%**
Hayti	166	7.8%	3.6%	452	8.4%	2.2%
Hand	**77**	*	*	**254**	**7.1%**	**2.8%**
Miller	77	*	*	254	7.1%	2.8%
Hanson	**82**	*	*	**240**	**8.8%**	**3.1%**
Alexandria	82	*	*	240	8.8%	3.1%
Harding	**13**	*	*	**40**	*	*
Buffalo	13	*	*	40	*	*
Hughes	**417**	**18.9%**	**3.5%**	**1,114**	**16.8%**	**2.0%**
Pierre	417	18.9%	3.5%	1,114	16.8%	2.0%
Hutchinson	**115**	**9.6%**	**4.8%**	**317**	**9.8%**	**2.9%**
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Parkston	61	*	*	179	7.3%	3.3%
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Highmore	49	*	*	129	19.4%	6.4%
Jackson	**217**	**20.7%**	**5.1%**	**638**	**25.7%**	**3.3%**
Kadoka	48	*	*	158	26.6%	6.7%
Wanblee	169	21.3%	5.8%	480	25.4%	3.8%
Jerauld	**37**	*	*	**84**	*	*
Wessington Springs	37	*	*	84	*	*
Jones	**45**	*	*	**165**	**9.1%**	**3.9%**
Murdo	45	*	*	165	9.1%	3.9%

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Pediatric Nutrition Surveillance System
High Weight-for-Height
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De Smet	47	*	*	148	9.5%	4.2%
Lake	**205**	**9.3%**	**3.5%**	**590**	**10.8%**	**2.2%**
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Lawrence	**446**	**7.6%**	**2.1%**	**1,281**	**8.9%**	**1.4%**
Deadwood	147	4.8%	3.0%	415	7.5%	2.2%
Spearfish	299	9.0%	2.9%	866	9.6%	1.7%
Lincoln	**133**	**13.5%**	**5.2%**	**378**	**14.0%**	**3.2%**
Canton	133	13.5%	5.2%	378	14.0%	3.2%
Lyman	**241**	**19.1%**	**4.6%**	**691**	**18.1%**	**2.7%**
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Lower Brule	197	20.3%	5.3%	569	19.2%	3.0%
Marshall	**51**	*	*	**162**	**11.1%**	**4.3%**
Britton	51	*	*	162	11.1%	4.3%
McCook	**110**	**12.7%**	**5.6%**	**327**	**11.6%**	**3.1%**
Salem	110	12.7%	5.6%	327	11.6%	3.1%
McPherson	**45**	*	*	**131**	**13.0%**	**5.2%**
Eureka	22	*	*	75	*	*
Leola	23	*	*	56	*	*
Meade	**399**	**10.8%**	**2.7%**	**1,165**	**8.9%**	**1.4%**
Faith	53	*	*	147	11.6%	4.6%
Sturgis	346	10.1%	2.8%	1,018	8.5%	1.5%
Miner	**44**	*	*	**124**	**5.6%**	**3.5%**
Howard	44	*	*	124	5.6%	3.5%
Minnehaha	**3,500**	**12.9%**	**1.0%**	**9,819**	**12.4%**	**0.6%**
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Sioux Falls - Westside	1,678	12.9%	1.4%	3,685	12.6%	1.0%
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Flandreau	146	16.4%	5.5%	386	16.6%	3.4%
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Rapid City	3,191	11.2%	1.0%	9,047	10.5%	0.6%
Wall	34	*	*	122	13.1%	5.4%
Perkins	**110**	**6.4%**	**4.0%**	**342**	**12.9%**	**3.2%**
Bison	32	*	*	105	9.5%	4.9%
Lemmon	78	*	*	237	14.3%	4.0%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (5) High Weight-For-Height: greater than or equal to 95th percentile based on 2000 CDC growth chart percentiles for weight-for-length for children under 2 years of age and BMI-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 11 (Continued)

Pediatric Nutrition Surveillance System
High Weight-for-Height
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data High Weight-for-Height (5)			Three Year Data (2001-2003) High Weight-for-Height (5)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Potter	**57**	*	*	**165**	**12.7%**	**4.6%**
Hoven	57	*	*	165	12.7%	4.6%
Roberts	**435**	**14.9%**	**3.0%**	**1,316**	**13.4%**	**1.7%**
Sisseton	435	14.9%	3.0%	1,316	13.4%	1.7%
Sanborn	**48**	*	*	**151**	**14.6%**	**5.1%**
Woonsocket	48	*	*	151	14.6%	5.1%
Shannon	**1,294**	**14.9%**	**1.8%**	**3,783**	**15.6%**	**1.1%**
Kyle	340	23.5%	4.3%	1,057	21.8%	2.4%
Manderson	92	*	*	266	10.2%	3.2%
Pine Ridge	732	11.9%	2.1%	2,037	12.7%	1.3%
Porcupine	130	10.8%	4.7%	423	18.0%	3.4%
Spink	**133**	**11.3%**	**4.8%**	**397**	**10.6%**	**2.7%**
Redfield	133	11.3%	4.8%	397	10.6%	2.7%
Stanley	**114**	**18.4%**	**6.6%**	**261**	**16.9%**	**4.2%**
Ft. Pierre	114	18.4%	6.6%	261	16.9%	4.2%
Sully	**19**	*	*	**47**	*	*
Onida	19	*	*	47	*	*
Tripp	**165**	**15.8%**	**5.1%**	**476**	**19.1%**	**3.3%**
Winner	165	15.8%	5.1%	476	19.1%	3.3%
Turner	**99**	*	*	**297**	**9.8%**	**3.0%**
Parker	36	*	*	108	5.6%	3.7%
Viborg	63	*	*	189	12.2%	4.2%
Union	**139**	**18.7%**	**6.0%**	**432**	**13.2%**	**2.9%**
Elk Point	139	18.7%	6.0%	432	13.2%	2.9%
Walworth	**180**	**13.3%**	**4.5%**	**550**	**14.5%**	**2.7%**
Mobridge	160	13.8%	4.8%	509	14.7%	2.8%
Selby	20	*	*	41	*	*
Yankton	**504**	**17.3%**	**3.0%**	**1,439**	**14.9%**	**1.7%**
Yankton	504	17.3%	3.0%	1,439	14.9%	1.7%
Ziebach	**43**	*	*	**148**	**14.2%**	**5.1%**
Dupree	43	*	*	148	14.2%	5.1%
Statewide PedNSS	**19,578**	**12.7%**	**0.4%**	**56,668**	**12.5%**	**0.2%**
National 2002		**13.5%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
(5) High Weight-For-Height: greater than or equal to 95th percentile based on 2000 CDC growth chart percentiles for weight-for-length for children under 2 years of age and BMI-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 12 (Continued)

Pediatric Nutrition Surveillance System
High Weight-for-Height
Reporting Period 01/01/2003 to 12/31/2003

Region**	2003 Data High Weight-for-Height (5)			Three Year Data (2001-2003) High Weight-for-Height (5)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aberdeen Area	973	12.3%	1.8%	2,870	11.8%	1.1%
East Central	824	9.8%	1.8%	2,372	10.6%	1.1%
Huron-Redfield	578	10.6%	2.2%	1,721	10.5%	1.3%
Mitchell-Chamberlain	845	11.4%	1.9%	2,399	11.8%	1.2%
Northern Black Hills	845	9.1%	1.7%	2,446	8.9%	1.0%
Northeast Area	1,427	13.8%	1.6%	4,256	12.9%	0.9%
North Central	333	11.4%	3.0%	1,018	13.7%	1.9%
Northwest Area	525	10.7%	2.3%	1,632	12.1%	1.4%
Oahe Area	733	17.3%	2.5%	1,970	15.5%	1.5%
Pickstown Area	929	13.7%	2.0%	2,726	14.7%	1.2%
Pine Ridge Area	1,705	16.3%	1.6%	5,004	17.8%	1.0%
Rapid City Area	3,816	10.4%	0.9%	10,925	9.7%	0.5%
Southeast Area	931	14.9%	2.1%	2,773	13.2%	1.1%
Sioux Falls Area	3,500	12.9%	1.0%	9,819	12.4%	0.6%
Sioux Empire Area	591	11.2%	2.3%	1,716	11.1%	1.3%
South Central	735	17.7%	2.6%	2,128	18.2%	1.5%
Southern Black Hills	288	12.5%	3.4%	893	12.4%	1.9%
Statewide PedNSS	**19,578**	**12.7%**	**0.4%**	**56,668**	**12.5%**	**0.2%**
National 2002		**13.5%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (5) High Weight-For-Height: greater than or equal to 95th percentile based on 2000 CDC growth chart percentiles for weight-for-length for children under 2 years of age and BMI-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.
** Counties by regions and regions by county conversion tables are in Appendix A and Appendix B.

Overweight and At Risk of Overweight (2 to 5 years of age)

The criteria for defining overweight infants and children up to 2 years of age is a weight-for-height value above the 95th percentile in the CDC's reference population of children matched for age, height, and sex. Children 2 years and older whose BMI-for-age is at or above the 95th percentile are defined as overweight. Obesity is defined as an excessive deposit of adipose tissue. A measure of weight-for-height above the 95th percentile does not measure fat tissue; it indicates but does not define obesity. Children 2 years and older whose BMI-for-age is between the 85th but below the 95th percentile are defined as "At risk of overweight".

Obesity is a risk factor for the following conditions in adulthood: cardiovascular disease, hypertension, diabetes, degenerative joint disease, and psychological problems. Studies show that 26 percent of overweight children (BMI above 95th percentile) 1-3 years will be obese at age 25 and 52 percent of overweight children 3 to 6 years will be obese at age 25. Whitaker et al. NEJM:1997;337:869-873.

Figure 12

South Dakota PedNSS
Prevalence of Overweight and at Risk of Overweight*
Among Children Aged 2 to <5 Years, by Race

* Overweight: > 95th percentile weight-for-length or BMI-for-age; at risk of overweight: > 85th-<95th percentile weight-for-length or BMI-for-age, CDC Growth Charts, 2000. 15% of children are expected to fall above the 85th percentile (5% above the 95th percentile and 10% between the 85th and 95th percentiles).

There are no Healthy People 2010 goals for overweight preschool children. The Healthy People 2010 target for the reduction of overweight or obese children age 6 to 11 is 5 percent. The 2003 rate of overweight, ages 2 to 5 years, in South Dakota's PedNSS records was 13.6 percent, up from 12.8 percent in 2002. The South Dakota PedNSS population rate for overweight children was 12.9 percent for the three-year period 2001-2003. The United States PedNSS population rate for overweight children was 14.3 percent in calendar year 2002.

The percent prevalence of overweight (greater than or equal to 95th percentile) and at risk of overweight (85th to 95th percentile) children by race/ethnicity and age are as follows:

Race/Ethnicity	At Risk of Overweight (85th to 95th percentile)	Overweight (≥95th percentile)
White	16.5	11.2
Black	14.0	15.9
American Indian/Alaska Native	21.0	19.1
Age		
2 years	18.1	13.5
3 years	18.2	13.6
4 years	16.7	13.6

Table 13

**Pediatric Nutrition Surveillance System
At Risk of Overweight - Ages 2 to 5 Years
Reporting Period 01/01/2003 to 12/31/2003**

County Clinic	2003 Data At Risk of Overweight (6)			Three Year Data (2001-2003) At Risk of Overweight (6)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aurora	**38**	*	*	**106**	**20.8%**	**7.3%**
Plankinton	38	*	*	106	20.8%	7.3%
Beadle	**189**	**21.2%**	**5.5%**	**557**	**15.3%**	**2.7%**
Huron	189	21.2%	5.5%	557	15.3%	2.7%
Bennett	**85**	*	*	**259**	**21.2%**	**4.7%**
Martin	85	*	*	259	21.2%	4.7%
Bon Homme	**82**	*	*	**230**	**17.0%**	**4.5%**
Tyndall	82	*	*	230	17.0%	4.5%
Brookings	**189**	**12.7%**	**4.3%**	**593**	**10.5%**	**2.2%**
Brookings	189	12.7%	4.3%	593	10.5%	2.2%
Brown	**322**	**14.9%**	**3.5%**	**935**	**16.9%**	**2.2%**
Aberdeen	322	14.9%	3.5%	935	16.9%	2.2%
Brule	**64**	*	*	**196**	**22.4%**	**5.6%**
Chamberlain	51	*	*	158	23.4%	6.3%
Kimball	13	*	*	38	*	*
Buffalo	**112**	**25.9%**	**7.9%**	**320**	**23.4%**	**4.4%**
Ft. Thompson	112	25.9%	7.9%	320	23.4%	4.4%
Butte	**145**	**15.9%**	**5.4%**	**431**	**16.0%**	**3.2%**
Belle Fourche	121	16.5%	6.1%	357	16.8%	3.6%
Newell	24	*	*	74	12.0%	6.6%
Charles Mix	**229**	**17.9%**	**4.6%**	**717**	**19.9%**	**2.7%**
Lake Andes	62	*	*	207	16.4%	4.6%
Platte	27	*	*	78	*	*
Wagner	140	19.3%	6.1%	432	21.8%	3.7%
Clark	**34**	*	*	**120**	**25.0%**	**7.5%**
Clark	34	*	*	120	25.0%	7.5%
Clay	**128**	**14.8%**	**5.6%**	**417**	**18.9%**	**3.5%**
Vermillion	128	14.8%	5.6%	417	18.9%	3.5%
Codington	**300**	**17.3%**	**4.0%**	**922**	**17.6%**	**2.3%**
Watertown	300	17.3%	4.0%	922	17.6%	2.3%
Corson	**9**	*	*	**26**	*	*
McLaughlin	9	*	*	26	*	*
Custer	**53**	*	*	**159**	**23.3%**	**6.3%**
Custer	53	*	*	159	23.3%	6.3%
Davison	**188**	**23.9%**	**5.9%**	**540**	**20.2%**	**3.2%**
Mitchell	188	23.9%	5.9%	540	20.2%	3.2%
Day	**83**	*	*	**271**	**11.8%**	**3.4%**
Webster	83	*	*	271	11.8%	3.4%
Deuel	**30**	*	*	**84**	*	*
Clear Lake	30	*	*	84	*	*

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
(6) At Risk of Overweight: 85th to 95th percentile based on BMI-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 13 (Continued)

Pediatric Nutrition Surveillance System
At Risk of Overweight - Ages 2 to 5 Years
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data At Risk of Overweight (6)			Three Year Data (2001-2003) At Risk of Overweight (6)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Dewey	**32**	*	*	**101**	**15.8%**	**6.5%**
Isabel	8	*	*	30	*	*
Timber Lake	24	*	*	71	*	*
Douglas	**41**	*	*	**101**	**15.8%**	**6.5%**
Armour	41	*	*	101	15.8%	6.5%
Edmunds	**32**	*	*	**98**	*	*
Bowdle	24	*	*	71	*	*
Ipswich	8	*	*	27	*	*
Fall River	**86**	*	*	**289**	**18.3%**	**4.1%**
Hot Springs	86	*	*	289	18.3%	4.1%
Faulk	**19**	*	*	**64**	*	*
Faulkton	19	*	*	64	*	*
Grant	**76**	*	*	**237**	**21.5%**	**5.0%**
Milbank	76	*	*	237	21.5%	5.0%
Gregory	**52**	*	*	**151**	**22.5%**	**6.3%**
Bonesteel	12	*	*	42	*	*
Burke	40	*	*	109	19.3%	6.9%
Haakon	**24**	*	*	**78**	*	*
Philip	24	*	*	78	*	*
Hamlin	**78**	*	*	**230**	**16.1%**	**4.4%**
Hayti	78	*	*	230	16.1%	4.4%
Hand	**42**	*	*	**144**	**9.0%**	**4.1%**
Miller	42	*	*	144	9.0%	4.1%
Hanson	**43**	*	*	**113**	**14.2%**	**5.8%**
Alexandria	43	*	*	113	14.2%	5.8%
Harding	**6**	*	*	**18**	*	*
Buffalo	6	*	*	18	*	*
Hughes	**170**	**27.6%**	**6.6%**	**501**	**25.5%**	**3.7%**
Pierre	170	27.6%	6.6%	501	25.5%	3.7%
Hutchinson	**50**	*	*	**149**	**18.1%**	**5.7%**
Freeman	21	*	*	55	*	*
Parkston	29	*	*	94	*	*
Hyde	**30**	*	*	**69**	*	*
Highmore	30	*	*	69	*	*
Jackson	**103**	**19.4%**	**7.1%**	**317**	**18.6%**	**4.0%**
Kadoka	26	*	*	95	*	*
Wanblee	77	*	*	222	19.8%	4.9%
Jerauld	**15**	*	*	**37**	*	*
Wessington Springs	15	*	*	37	*	*
Jones	**24**	*	*	**86**	*	*
Murdo	24	*	*	86	*	*

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (6) At Risk of Overweight: 85th to 95th percentile based on BMI-for-age for children 2 years of age and older; excludes
    records with biologically implausible values for height, age, and weight.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
    reliability or precision.

Table 13 (Continued)

Pediatric Nutrition Surveillance System
At Risk of Overweight - Ages 2 to 5 Years
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data At Risk of Overweight (6)			Three Year Data (2001-2003) At Risk of Overweight (6)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Kingsbury	**24**	*	*	**70**	*	*
De Smet	24	*	*	70	*	*
Lake	**87**	*	*	**258**	**20.2%**	**4.6%**
Madison	87	*	*	258	20.2%	4.6%
Lawrence	**177**	**14.1%**	**4.6%**	**510**	**8.4%**	**2.1%**
Deadwood	62	*	*	160	8.8%	3.9%
Spearfish	115	15.7%	6.1%	350	8.3%	2.5%
Lincoln	**57**	*	*	**176**	**17.0%**	**5.1%**
Canton	57	*	*	176	17.0%	5.1%
Lyman	**127**	**14.2%**	**5.5%**	**370**	**16.8%**	**3.5%**
Kennebec	27	*	*	73	*	*
Lower Brule	100	16.0%	6.6%	297	17.2%	4.0%
Marshall	**28**	*	*	**91**	*	*
Britton	28	*	*	91	*	*
McCook	**52**	*	*	**174**	**19.0%**	**5.4%**
Salem	52	*	*	174	19.0%	5.4%
McPherson	**21**	*	*	**71**	*	*
Eureka	10	*	*	39	*	*
Leola	11	*	*	32	*	*
Meade	**181**	**20.4%**	**5.5%**	**552**	**17.0%**	**2.9%**
Faith	28	*	*	80	*	*
Sturgis	153	17.0%	5.5%	472	16.3%	3.1%
Miner	**23**	*	*	**55**	*	*
Howard	23	*	*	55	*	*
Minnehaha	**1,354**	**19.6%**	**2.0%**	**3,845**	**18.2%**	**1.1%**
Sioux Falls - Downtown	93	*	*	1,056	17.6%	2.1%
Sioux Falls - Eastside	629	18.0%	2.8%	1,372	17.6%	1.9%
Sioux Falls - Westside	632	21.0%	3.0%	1,417	19.1%	1.9%
Moody	**65**	*	*	**153**	**19.0%**	**5.8%**
Flandreau	65	*	*	153	19.0%	5.8%
Pennington	**1,565**	**16.2%**	**1.7%**	**4,715**	**16.5%**	**1.0%**
Ellsworth	209	7.2%	3.1%	648	11.3%	2.2%
Hill City	32	*	*	96	*	*
Rapid City	1,306	17.9%	1.9%	3,913	17.5%	1.1%
Wall	18	*	*	58	*	*
Perkins	**55**	*	*	**191**	**14.7%**	**4.6%**
Bison	18	*	*	63	*	*
Lemmon	37	*	*	128	11.7%	5.0%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.

(6) At Risk of Overweight: 85th to 95th percentile based on BMI-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.

* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 13 (Continued)

Pediatric Nutrition Surveillance System
At Risk of Overweight - Ages 2 to 5 Years
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data At Risk of Overweight (6)			Three Year Data (2001-2003) At Risk of Overweight (6)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Potter	**31**	*	*	**81**	*	*
Hoven	31	*	*	81	*	*
Roberts	**189**	**15.9%**	**4.8%**	**617**	**17.3%**	**2.8%**
Sisseton	189	15.9%	4.8%	617	17.3%	2.8%
Sanborn	**19**	*	*	**56**	*	*
Woonsocket	19	*	*	56	*	*
Shannon	**559**	**15.9%**	**2.8%**	**1,715**	**13.6%**	**1.5%**
Kyle	155	20.6%	6.0%	503	22.5%	3.5%
Manderson	34	*	*	106	3.8%	3.1%
Pine Ridge	313	16.0%	3.7%	896	11.0%	1.8%
Porcupine	57	*	*	210	8.1%	3.2%
Spink	**50**	*	*	**177**	**18.6%**	**5.3%**
Redfield	50	*	*	177	18.6%	5.3%
Stanley	**56**	*	*	**129**	**14.7%**	**5.6%**
Ft. Pierre	56	*	*	129	14.7%	5.6%
Sully	**9**	*	*	**25**	*	*
Onida	9	*	*	25	*	*
Tripp	**85**	*	*	**231**	**15.2%**	**4.2%**
Winner	85	*	*	231	15.2%	4.2%
Turner	**42**	*	*	**123**	**20.3%**	**6.7%**
Parker	17	*	*	44	*	*
Viborg	25	*	*	79	*	*
Union	**48**	*	*	**158**	**15.2%**	**5.1%**
Elk Point	48	*	*	158	15.2%	5.1%
Walworth	**89**	*	*	**269**	**20.8%**	**4.6%**
Mobridge	82	*	*	251	21.9%	4.9%
Selby	7	*	*	18	*	*
Yankton	**204**	**18.1%**	**4.9%**	**606**	**16.3%**	**2.7%**
Yankton	204	18.1%	4.9%	606	16.3%	2.7%
Ziebach	**23**	*	*	**77**	*	*
Dupree	23	*	*	77	*	*
Statewide PedNSS	**8,423**	**17.7%**	**0.8%**	**25,161**	**17.1%**	**0.4%**
National 2002		**15.4%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (6) At Risk of Overweight: 85th to 95th percentile based on BMI-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 14

Pediatric Nutrition Surveillance System
At Risk of Overweight - Ages 2 to 5 Years
Reporting Period 01/01/2003 to 12/31/2003

Region**	2003 Data At Risk of Overweight (6)			Three Year Data (2001-2003) At Risk of Overweight (6)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aberdeen Area	433	14.1%	3.0%	1,297	15.6%	1.8%
East Central	356	15.7%	3.5%	1,046	13.4%	1.9%
Huron-Redfield	239	19.2%	4.7%	734	16.1%	2.4%
Mitchell-Chamberlain	367	21.3%	4.0%	1,048	20.1%	2.3%
Northern Black Hills	358	17.3%	3.6%	1,062	12.9%	1.8%
Northeast Area	629	16.7%	2.7%	1,980	18.5%	1.6%
North Central	170	18.8%	5.5%	528	16.7%	2.9%
Northwest Area	261	15.7%	4.0%	818	15.6%	2.3%
Oahe Area	338	22.8%	4.3%	949	20.0%	2.4%
Pickstown Area	454	19.4%	3.4%	1,348	19.2%	2.0%
Pine Ridge Area	747	16.9%	2.5%	2,291	15.1%	1.3%
Rapid City Area	1,565	16.2%	1.7%	4,715	16.5%	1.0%
Southeast Area	380	16.6%	3.4%	1,181	17.1%	2.0%
Sioux Falls Area	1,354	19.6%	2.0%	3,845	18.2%	1.1%
Sioux Empire Area	261	19.2%	4.5%	786	18.6%	2.5%
South Central	372	17.5%	3.6%	1,085	19.0%	2.2%
Southern Black Hills	139	15.8%	5.5%	448	20.1%	3.5%
Statewide PedNSS	**8,423**	**17.7%**	**0.8%**	**25,161**	**17.1%**	**0.4%**
National 2002		**15.4%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (6) At Risk of Overweight: 85th to 95th percentile based on BMI-for-age for children 2 years of age and older; excludes
    records with biologically implausible values for height, age, and weight.
** Counties by regions and regions by county conversion tables are in Appendix A and Appendix B.

Table 15

Pediatric Nutrition Surveillance System
Overweight - Ages 2 to 5 Years
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Overweight (7)			Three Year Data (2001-2003) Overweight (7)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aurora	**38**	*	*	**106**	**16.0%**	**6.4%**
Plankinton	38	*	*	106	16.0%	6.4%
Beadle	**189**	**7.4%**	**3.3%**	**557**	**10.4%**	**2.2%**
Huron	189	7.4%	3.3%	557	10.4%	2.2%
Bennett	**85**	*	*	**259**	**21.2%**	**4.7%**
Martin	85	*	*	259	21.2%	4.7%
Bon Homme	**82**	*	*	**230**	**10.0%**	**3.4%**
Tyndall	82	*	*	230	10.0%	3.4%
Brookings	**189**	**7.4%**	**3.3%**	**593**	**9.6%**	**2.1%**
Brookings	189	7.4%	3.3%	593	9.6%	2.1%
Brown	**322**	**12.4%**	**3.2%**	**935**	**12.4%**	**1.9%**
Aberdeen	322	12.4%	3.2%	935	12.4%	1.9%
Brule	**64**	*	*	**196**	**10.2%**	**3.8%**
Chamberlain	51	*	*	158	10.1%	4.2%
Kimball	13	*	*	38	*	*
Buffalo	**112**	**24.1%**	**7.6%**	**320**	**17.8%**	**3.9%**
Ft. Thompson	112	24.1%	7.6%	320	17.8%	3.9%
Butte	**145**	**10.3%**	**4.4%**	**431**	**11.4%**	**2.7%**
Belle Fourche	121	12.4%	5.3%	357	12.9%	3.1%
Newell	24	*	*	74	6.0%	4.7%
Charles Mix	**229**	**16.2%**	**4.4%**	**717**	**17.6%**	**2.6%**
Lake Andes	62	*	*	207	16.4%	4.6%
Platte	27	*	*	78	*	*
Wagner	140	21.4%	6.4%	432	19.9%	3.5%
Clark	**34**	*	*	**120**	**8.3%**	**4.3%**
Clark	34	*	*	120	8.3%	4.3%
Clay	**128**	**13.3%**	**5.3%**	**417**	**13.7%**	**3.0%**
Vermillion	128	13.3%	5.3%	417	13.7%	3.0%
Codington	**300**	**16.3%**	**3.8%**	**922**	**16.1%**	**2.2%**
Watertown	300	16.3%	3.8%	922	16.1%	2.2%
Corson	**9**	*	*	**26**	*	*
McLaughlin	9	*	*	26	*	*
Custer	**53**	*	*	**159**	**4.4%**	**2.7%**
Custer	53	*	*	159	4.4%	2.7%
Davison	**188**	**13.3%**	**4.4%**	**540**	**12.4%**	**2.5%**
Mitchell	188	13.3%	4.4%	540	12.4%	2.5%
Day	**83**	*	*	**271**	**7.4%**	**2.7%**
Webster	83	*	*	271	7.4%	2.7%
Deuel	**30**	*	*	**84**	*	*
Clear Lake	30	*	*	84	*	*

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
(7) Overweight: greater than or equal to 95th percentile based on BMI-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 15 (Continued)

Pediatric Nutrition Surveillance System
Overweight - Ages 2 to 5 Years
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Overweight (7)			Three Year Data (2001-2003) Overweight (7)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Dewey	**32**	*	*	**101**	**11.9%**	**5.6%**
Isabel	8	*	*	30	*	*
Timber Lake	24	*	*	71	*	*
Douglas	**41**	*	*	**101**	**12.9%**	**5.9%**
Armour	41	*	*	101	12.9%	5.9%
Edmunds	**32**	*	*	**98**	*	*
Bowdle	24	*	*	71	*	*
Ipswich	8	*	*	27	*	*
Fall River	**86**	*	*	**289**	**15.9%**	**3.9%**
Hot Springs	86	*	*	289	15.9%	3.9%
Faulk	**19**	*	*	**64**	*	*
Faulkton	19	*	*	64	*	*
Grant	**76**	*	*	**237**	**16.9%**	**4.4%**
Milbank	76	*	*	237	16.9%	4.4%
Gregory	**52**	*	*	**151**	**11.3%**	**4.5%**
Bonesteel	12	*	*	42	*	*
Burke	40	*	*	109	7.3%	4.3%
Haakon	**24**	*	*	**78**	*	*
Philip	24	*	*	78	*	*
Hamlin	**78**	*	*	**230**	**7.8%**	**3.0%**
Hayti	78	*	*	230	7.8%	3.0%
Hand	**42**	*	*	**144**	**4.9%**	**3.0%**
Miller	42	*	*	144	4.9%	3.0%
Hanson	**43**	*	*	**113**	**8.0%**	**4.4%**
Alexandria	43	*	*	113	8.0%	4.4%
Harding	**6**	*	*	**18**	*	*
Buffalo	6	*	*	18	*	*
Hughes	**170**	**18.2%**	**5.4%**	**501**	**15.6%**	**2.9%**
Pierre	170	18.2%	5.4%	501	15.6%	2.9%
Hutchinson	**50**	*	*	**149**	**5.4%**	**3.1%**
Freeman	21	*	*	55	*	*
Parkston	29	*	*	94	*	*
Hyde	**30**	*	*	**69**	*	*
Highmore	30	*	*	69	*	*
Jackson	**103**	**24.3%**	**8.0%**	**317**	**30.0%**	**5.1%**
Kadoka	26	*	*	95	*	*
Wanblee	77	*	*	222	31.1%	6.2%
Jerauld	**15**	*	*	**37**	*	*
Wessington Springs	15	*	*	37	*	*
Jones	**24**	*	*	**86**	*	*
Murdo	24	*	*	86	*	*

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
(7) Overweight: greater than or equal to 95th percentile based on BMI-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 15 (Continued)

Pediatric Nutrition Surveillance System
Overweight - Ages 2 to 5 Years
Reporting Period 01/01/2003 to 12/31/2003

County	2003 Data Overweight (7)			Three Year Data (2001-2003) Overweight (7)		
Clinic	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Kingsbury	**24**	*	*	**70**	*	*
De Smet	24	*	*	70	*	*
Lake	**87**	*	*	**258**	**12.8%**	**3.7%**
Madison	87	*	*	258	12.8%	3.7%
Lawrence	**177**	**4.5%**	**2.6%**	**510**	**5.9%**	**1.8%**
Deadwood	62	*	*	160	8.1%	3.7%
Spearfish	115	5.2%	3.5%	350	4.9%	1.9%
Lincoln	**57**	*	*	**176**	**16.5%**	**5.0%**
Canton	57	*	*	176	16.5%	5.0%
Lyman	**127**	**12.6%**	**5.2%**	**370**	**13.8%**	**3.2%**
Kennebec	27	*	*	73	*	*
Lower Brule	100	14.0%	6.2%	297	15.5%	3.8%
Marshall	**28**	*	*	**91**	*	*
Britton	28	*	*	91	*	*
McCook	**52**	*	*	**174**	**12.6%**	**4.4%**
Salem	52	*	*	174	12.6%	4.4%
McPherson	**21**	*	*	**71**	*	*
Eureka	10	*	*	39	*	*
Leola	11	*	*	32	*	*
Meade	**181**	**11.6%**	**4.2%**	**552**	**9.6%**	**2.2%**
Faith	28	*	*	80	*	*
Sturgis	153	11.1%	4.4%	472	9.3%	2.3%
Miner	**23**	*	*	**55**	*	*
Howard	23	*	*	55	*	*
Minnehaha	**1,354**	**15.4%**	**1.8%**	**3,845**	**14.4%**	**1.0%**
Sioux Falls - Downtown	93	*	*	1,056	15.7%	2.0%
Sioux Falls - Eastside	629	14.5%	2.5%	1,372	13.6%	1.6%
Sioux Falls - Westside	632	15.7%	2.6%	1,417	14.3%	1.7%
Moody	**65**	*	*	**153**	**13.1%**	**4.8%**
Flandreau	65	*	*	153	13.1%	4.8%
Pennington	**1,565**	**12.0%**	**1.4%**	**4,715**	**10.9%**	**0.8%**
Ellsworth	209	7.7%	3.2%	648	6.8%	1.7%
Hill City	32	*	*	96	*	*
Rapid City	1,306	13.0%	1.6%	3,913	11.7%	0.9%
Wall	18	*	*	58	*	*
Perkins	**55**	*	*	**191**	**11.5%**	**4.0%**
Bison	18	*	*	63	*	*
Lemmon	37	*	*	128	13.3%	5.3%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
(7) Overweight: greater than or equal to 95th percentile based on BMI-for-age for children 2 years of age and older; excludes records with biologically implausible values for height, age, and weight.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 15 (Continued)

Pediatric Nutrition Surveillance System
Overweight - Ages 2 to 5 Years
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Overweight (7)			Three Year Data (2001-2003) Overweight (7)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Potter	**31**	*	*	**81**	*	*
Hoven	31	*	*	81	*	*
Roberts	**189**	**20.1%**	**5.4%**	**617**	**16.2%**	**2.7%**
Sisseton	189	20.1%	5.4%	617	16.2%	2.7%
Sanborn	**19**	*	*	**56**	*	*
Woonsocket	19	*	*	56	*	*
Shannon	**559**	**13.1%**	**2.5%**	**1,715**	**12.2%**	**1.4%**
Kyle	155	30.3%	7.3%	503	25.2%	3.7%
Manderson	34	*	*	106	1.9%	2.2%
Pine Ridge	313	7.0%	2.5%	896	5.9%	1.3%
Porcupine	57	*	*	210	12.9%	4.1%
Spink	**50**	*	*	**177**	**10.7%**	**4.0%**
Redfield	50	*	*	177	10.7%	4.0%
Stanley	**56**	*	*	**129**	**14.7%**	**5.6%**
Ft. Pierre	56	*	*	129	14.7%	5.6%
Sully	**9**	*	*	**25**	*	*
Onida	9	*	*	25	*	*
Tripp	**85**	*	*	**231**	**18.6%**	**4.7%**
Winner	85	*	*	231	18.6%	4.7%
Turner	**42**	*	*	**123**	**12.2%**	**5.2%**
Parker	17	*	*	44	*	*
Viborg	25	*	*	79	*	*
Union	**48**	*	*	**158**	**16.5%**	**5.3%**
Elk Point	48	*	*	158	16.5%	5.3%
Walworth	**89**	*	*	**269**	**14.5%**	**3.8%**
Mobridge	82	*	*	251	15.5%	4.1%
Selby	7	*	*	18	*	*
Yankton	**204**	**20.1%**	**5.2%**	**606**	**15.8%**	**2.7%**
Yankton	204	20.1%	5.2%	606	15.8%	2.7%
Ziebach	**23**	*	*	**77**	*	*
Dupree	23	*	*	77	*	*
Statewide PedNSS	**8,423**	**13.6%**	**0.7%**	**25,161**	**12.9%**	**0.4%**
National 2002		**14.3%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (7) Overweight: greater than or equal to 95th percentile based on BMI-for-age for children 2 years of age and older; excludes
    records with biologically implausible values for height, age, and weight.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
    reliability or precision.

Table 16

Pediatric Nutrition Surveillance System
Overweight - Ages 2 to 5 Years
Reporting Period 01/01/2003 to 12/31/2003

Region**	2003 Data Overweight (7)			Three Year Data (2001-2003) Overweight (7)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aberdeen Area	433	12.2%	2.8%	1,297	11.0%	1.5%
East Central	356	9.0%	2.6%	1,046	9.6%	1.6%
Huron-Redfield	239	8.4%	3.1%	734	10.5%	2.0%
Mitchell-Chamberlain	367	13.1%	3.1%	1,048	12.2%	1.8%
Northern Black Hills	358	8.1%	2.5%	1,062	7.8%	1.4%
Northeast Area	629	16.7%	2.7%	1,980	15.4%	1.5%
North Central	170	11.2%	4.2%	528	12.5%	2.5%
Northwest Area	261	10.3%	3.3%	818	11.5%	2.0%
Oahe Area	338	15.7%	3.5%	949	14.0%	2.0%
Pickstown Area	454	13.7%	2.9%	1,348	13.9%	1.7%
Pine Ridge Area	747	15.8%	2.4%	2,291	15.7%	1.4%
Rapid City Area	1,565	12.0%	1.4%	4,715	10.9%	0.8%
Southeast Area	380	17.4%	3.5%	1,181	15.2%	1.9%
Sioux Falls Area	1,354	15.4%	1.8%	3,845	14.4%	1.0%
Sioux Empire Area	261	13.8%	3.8%	786	13.0%	2.1%
South Central	372	16.1%	3.4%	1,085	15.4%	2.0%
Southern Black Hills	139	12.2%	4.9%	448	11.8%	2.7%
Statewide PedNSS	**8,423**	**13.6%**	**0.7%**	**25,161**	**12.9%**	**0.4%**
National 2002		**14.3%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (7) Overweight: greater than or equal to 95th percentile based on BMI-for-age for children 2 years of age and older; excludes
     records with biologically implausible values for height, age, and weight.
** Counties by regions and regions by county conversion tables are in Appendix A and Appendix B.
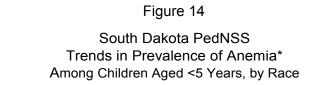
Anemia
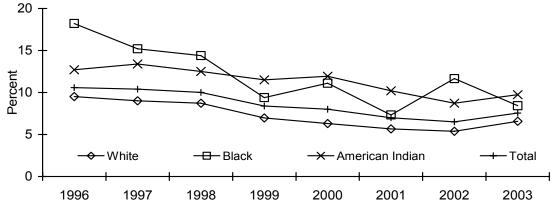
Anemia is defined as having low hemoglobin (Hb) concentrations or hematocrit (Hct) values when measuring a healthy reference population of the same age. The PedNSS uses a hemoglobin and/or hematocrit value below the 5th percentile of the third National Health and Nutrition Examination Survey (NHANES III) reference population.

The percent prevalence in South Dakota's PedNSS population with anemia was 7.6 percent in 2003, up from 6.5 percent in 2001. The percent of the South Dakota PedNSS population with anemia was 7.0 percent over the three-year period 2001-2003. The United States PedNSS population had an anemia rate of 13.1 percent in calendar year 2002.

Figure 13

South Dakota PedNSS
Prevalence of Anemia*
Among Children Aged <5 Years, by Race

* Hb or Hct < 5th percentile, CDC MMWR vol. 47 (No. RR-3), 1998.

Figure 14

South Dakota PedNSS
Trends in Prevalence of Anemia*
Among Children Aged <5 Years, by Race

* Hb or Hct < 5th percentile, CDC MMWR vol. 47 (No. RR-3), 1998.

The Healthy People 2010 target for reducing iron deficiency among children ages 1-2 is 5 percent. The Healthy People 2010 target for reducing iron deficiency among children ages 3-4 is 1 percent.

The percent prevalence of children with anemia by race in South Dakota's 2003 PedNSS population was 6.6 percent for whites, 8.4 percent for blacks, 9.8 percent for American Indians or Alaskan Natives, and 14.4 percent for Asian or Pacific Islanders. The age breakdown for this population was: less than 12 months, 10.3 percent; 12 through 17 months, 8.4 percent; 18 through 23 months, 8.0 percent; 24 through 35 months, 7.5 percent; and 36 through 59 months, 5.1. When converted to whole years the age breakdown for this population was: less than one year, 10.3 percent, 1 through 2 years 7.9 percent, and 3 through 4 years of age, 5.1 percent

Table 17

Pediatric Nutrition Surveillance System
Anemia
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Anemia (8)			Three Year Data (2001-2003) Anemia (8)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aurora	**57**	*	*	**166**	**6.6%**	**3.3%**
Plankinton	57	*	*	166	6.6%	3.3%
Beadle	**344**	**2.5%**	**1.4%**	**968**	**3.6%**	**1.0%**
Huron	344	2.5%	1.4%	968	3.6%	1.0%
Bennett	**154**	**14.9%**	**5.1%**	**470**	**17.0%**	**3.1%**
Martin	154	14.9%	5.1%	470	17.0%	3.1%
Bon Homme	**129**	**2.3%**	**2.2%**	**338**	**4.7%**	**1.9%**
Tyndall	129	2.3%	2.2%	338	4.7%	1.9%
Brookings	**314**	**6.4%**	**2.3%**	**989**	**3.9%**	**1.0%**
Brookings	314	6.4%	2.3%	989	3.9%	1.0%
Brown	**537**	**8.0%**	**2.0%**	**1,576**	**5.4%**	**1.0%**
Aberdeen	537	8.0%	2.0%	1,576	5.4%	1.0%
Brule	**93**	*	*	**279**	**3.6%**	**1.9%**
Chamberlain	77	*	*	241	4.1%	2.1%
Kimball	16	*	*	38	*	*
Buffalo	**174**	**3.4%**	**2.3%**	**479**	**4.4%**	**1.6%**
Ft. Thompson	174	3.4%	2.3%	479	4.4%	1.6%
Butte	**214**	**9.8%**	**3.5%**	**664**	**6.8%**	**1.7%**
Belle Fourche	181	9.4%	3.7%	556	7.0%	1.8%
Newell	33	*	*	108	5.6%	3.7%
Charles Mix	**349**	**9.5%**	**2.7%**	**1,072**	**9.8%**	**1.6%**
Lake Andes	92	*	*	303	8.3%	2.7%
Platte	42	*	*	113	11.5%	5.2%
Wagner	215	9.3%	3.4%	656	10.2%	2.1%
Clark	**55**	*	*	**180**	**4.4%**	**2.6%**
Clark	55	*	*	180	4.4%	2.6%
Clay	**208**	**6.7%**	**3.0%**	**674**	**5.6%**	**1.5%**
Vermillion	208	6.7%	3.0%	674	5.6%	1.5%
Codington	**489**	**6.3%**	**1.9%**	**1,466**	**5.0%**	**1.0%**
Watertown	489	6.3%	1.9%	1,466	5.0%	1.0%
Corson	**12**	*	*	**38**	*	*
McLaughlin	12	*	*	38	*	*
Custer	**71**	*	*	**223**	**4.9%**	**2.4%**
Custer	71	*	*	223	4.9%	2.4%
Davison	**352**	**4.3%**	**1.8%**	**939**	**6.8%**	**1.4%**
Mitchell	352	4.3%	1.8%	939	6.8%	1.4%
Day	**128**	**3.1%**	**2.6%**	**396**	**2.5%**	**1.3%**
Webster	128	3.1%	2.6%	396	2.5%	1.3%
Deuel	**35**	*	*	**102**	**5.9%**	**4.0%**
Clear Lake	35	*	*	102	5.9%	4.0%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (8) Anemia: Hemoglobin (Hb) concentrations or hematocrit (Hct) values less than 5th percentile of NHANES III survey,
    children 6 months to 5 years of age included in the analysis.
 * Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
    reliability or precision.

Table 17 (Continued)

Pediatric Nutrition Surveillance System
Anemia
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2002 Data Anemia (8)			Three Year Data (2000-2002) Anemia (8)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Dewey	**49**	*	*	**154**	**1.3%**	**1.5%**
Isabel	15	*	*	53	*	*
Timber Lake	34	*	*	101	2.0%	2.3%
Douglas	**52**	*	*	**142**	**12.0%**	**4.8%**
Armour	52	*	*	142	12.0%	4.8%
Edmunds	**45**	*	*	**140**	**5.0%**	**3.1%**
Bowdle	32	*	*	103	5.8%	3.9%
Ipswich	13	*	*	37	*	*
Fall River	**139**	**15.1%**	**5.4%**	**442**	**12.4%**	**2.8%**
Hot Springs	139	15.1%	5.4%	442	12.4%	2.8%
Faulk	**34**	*	*	**97**	*	*
Faulkton	34	*	*	97	*	*
Grant	**138**	**6.5%**	**3.6%**	**395**	**4.6%**	**1.8%**
Milbank	138	6.5%	3.6%	395	4.6%	1.8%
Gregory	**82**	*	*	**240**	**4.6%**	**2.3%**
Bonesteel	18	*	*	68	*	*
Burke	64	*	*	172	3.5%	2.3%
Haakon	**38**	*	*	**114**	**2.6%**	**2.5%**
Philip	38	*	*	114	2.6%	2.5%
Hamlin	**123**	**17.1%**	**6.1%**	**331**	**16.9%**	**3.7%**
Hayti	123	17.1%	6.1%	331	16.9%	3.7%
Hand	**56**	*	*	**190**	**6.3%**	**3.0%**
Miller	56	*	*	190	6.3%	3.0%
Hanson	**64**	*	*	**179**	**7.3%**	**3.3%**
Alexandria	64	*	*	179	7.3%	3.3%
Harding	**9**	*	*	**28**	*	*
Buffalo	9	*	*	28	*	*
Hughes	**300**	**2.0%**	**1.3%**	**819**	**1.7%**	**0.7%**
Pierre	300	2.0%	1.3%	819	1.7%	0.7%
Hutchinson	**98**	*	*	**242**	**7.9%**	**3.0%**
Freeman	45	*	*	90	*	*
Parkston	53	*	*	152	3.3%	2.4%
Hyde	**36**	*	*	**92**	*	*
Highmore	36	*	*	92	*	*
Jackson	**179**	**23.5%**	**6.0%**	**531**	**21.8%**	**3.3%**
Kadoka	41	*	*	137	11.7%	4.8%
Wanblee	138	26.1%	7.2%	394	25.4%	4.2%
Jerauld	**25**	*	*	**60**	*	*
Wessington Springs	25	*	*	60	*	*
Jones	**36**	*	*	**131**	**9.2%**	**4.4%**
Murdo	36	*	*	131	9.2%	4.4%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (8) Anemia: Hemoglobin (Hb) concentrations or hematocrit (Hct) values less than 5th percentile of NHANES III survey, children 6 months to 5 years of age included in the analysis.
 *   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 17 (Continued)

Pediatric Nutrition Surveillance System
Anemia
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Anemia (8)			Three Year Data (2001-2003) Anemia (8)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Kingsbury	**38**	*	*	**116**	**2.6%**	**2.5%**
De Smet	38	*	*	116	2.6%	2.5%
Lake	**145**	**8.3%**	**3.9%**	**434**	**5.5%**	**1.9%**
Madison	145	8.3%	3.9%	434	5.5%	1.9%
Lawrence	**325**	**4.6%**	**2.0%**	**931**	**2.9%**	**0.9%**
Deadwood	115	3.5%	2.9%	306	2.6%	1.5%
Spearfish	210	5.2%	2.6%	625	3.0%	1.1%
Lincoln	**94**	*	*	**277**	**3.2%**	**1.8%**
Canton	94	*	*	277	3.2%	1.8%
Lyman	**184**	**1.1%**	**1.3%**	**535**	**2.2%**	**1.1%**
Kennebec	31	*	*	93	*	*
Lower Brule	153	1.3%	1.5%	442	2.0%	1.1%
Marshall	**34**	*	*	**121**	**4.1%**	**3.0%**
Britton	34	*	*	121	4.1%	3.0%
McCook	**82**	*	*	**252**	**2.0%**	**1.5%**
Salem	82	*	*	252	2.0%	1.5%
McPherson	**32**	*	*	**107**	**4.7%**	**3.4%**
Eureka	18	*	*	62	*	*
Leola	14	*	*	45	*	*
Meade	**291**	**5.5%**	**2.3%**	**872**	**5.6%**	**1.3%**
Faith	42	*	*	120	4.2%	3.1%
Sturgis	249	5.2%	2.4%	752	5.9%	1.5%
Miner	**35**	*	*	**101**	**5.0%**	**3.7%**
Howard	35	*	*	101	5.0%	3.7%
Minnehaha	**2,330**	**7.7%**	**0.9%**	**6,721**	**6.9%**	**0.5%**
Sioux Falls - Downtown	130	2.3%	2.2%	1,829	5.1%	0.9%
Sioux Falls - Eastside	1,083	7.3%	1.4%	2,381	6.9%	0.9%
Sioux Falls - Westside	1,117	8.7%	1.5%	2,511	8.2%	0.9%
Moody	**111**	**19.8%**	**6.9%**	**289**	**22.5%**	**4.6%**
Flandreau	111	19.8%	6.9%	289	22.5%	4.6%
Pennington	**2,697**	**7.0%**	**0.8%**	**7,731**	**6.1%**	**0.5%**
Ellsworth	360	12.5%	3.1%	1,086	12.1%	1.7%
Hill City	57	*	*	145	1.4%	1.6%
Rapid City	2,255	6.3%	0.9%	6,409	5.2%	0.5%
Wall	25	*	*	91	*	*
Perkins	**86**	*	*	**274**	**6.2%**	**2.5%**
Bison	26	*	*	83	*	*
Lemmon	60	*	*	191	5.2%	2.7%

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.

(8) Anemia: Hemoglobin (Hb) concentrations or hematocrit (Hct) values less than 5th percentile of NHANES III survey, children 6 months to 5 years of age included in the analysis.

* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 17 (Continued)

Pediatric Nutrition Surveillance System
Anemia
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Anemia (8)			Three Year Data (2001-2003) Anemia (8)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Potter	**41**	*	*	**121**	**4.1%**	**3.0%**
Hoven	41	*	*	121	4.1%	3.0%
Roberts	**301**	**11.6%**	**3.2%**	**976**	**13.1%**	**1.9%**
Sisseton	301	11.6%	3.2%	976	13.1%	1.9%
Sanborn	**37**	*	*	**120**	**8.3%**	**4.3%**
Woonsocket	37	*	*	120	8.3%	4.3%
Shannon	**918**	**10.8%**	**1.8%**	**2,837**	**11.4%**	**1.0%**
Kyle	228	3.1%	1.9%	751	6.1%	1.5%
Manderson	58	*	*	182	15.4%	4.8%
Pine Ridge	534	11.6%	2.4%	1,581	11.8%	1.4%
Porcupine	98	*	*	323	19.2%	4.0%
Spink	**103**	**7.8%**	**4.5%**	**300**	**6.0%**	**2.3%**
Redfield	103	7.8%	4.5%	300	6.0%	2.3%
Stanley	**88**	*	*	**206**	**4.4%**	**2.4%**
Ft. Pierre	88	*	*	206	4.4%	2.4%
Sully	**12**	*	*	**33**	*	*
Onida	12	*	*	33	*	*
Tripp	**141**	**17.7%**	**5.8%**	**388**	**14.7%**	**3.2%**
Winner	141	17.7%	5.8%	388	14.7%	3.2%
Turner	**71**	*	*	**204**	**5.9%**	**2.8%**
Parker	26	*	*	78	*	*
Viborg	45	*	*	126	4.0%	2.9%
Union	**85**	*	*	**276**	**6.2%**	**2.5%**
Elk Point	85	*	*	276	6.2%	2.5%
Walworth	**132**	**3.0%**	**2.5%**	**402**	**4.7%**	**1.8%**
Mobridge	116	2.6%	2.5%	371	4.9%	1.9%
Selby	16	*	*	31	*	*
Yankton	**355**	**9.3%**	**2.7%**	**1,022**	**8.7%**	**1.5%**
Yankton	355	9.3%	2.7%	1,022	8.7%	1.5%
Ziebach	**32**	*	*	**115**	**1.7%**	**2.0%**
Dupree	32	*	*	115	1.7%	2.0%
Statewide PedNSS	**14,018**	**7.6%**	**0.4%**	**41,107**	**7.0%**	**0.2%**
National 2002		**13.1%**				

Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (8) Anemia: Hemoglobin (Hb) concentrations or hematocrit (Hct) values less than 5th percentile of NHANES III survey,
    children 6 months to 5 years of age included in the analysis.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
    reliability or precision.

Table 18

Pediatric Nutrition Surveillance System
Anemia
Reporting Period 01/01/2003 to 12/31/2003

Region**	2003 Data Anemia (8)			Three Year Data (2001-2003) Anemia (8)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aberdeen Area	699	7.0%	1.6%	2,093	4.8%	0.8%
East Central	586	10.9%	2.2%	1,725	9.4%	1.2%
Huron-Redfield	447	4.5%	1.7%	1,268	4.2%	0.9%
Mitchell-Chamberlain	628	5.3%	1.5%	1,743	6.2%	1.0%
Northern Black Hills	616	5.0%	1.5%	1,803	4.2%	0.8%
Northeast Area	1,018	7.9%	1.4%	3,119	7.5%	0.8%
North Central	255	5.1%	2.3%	784	6.8%	1.5%
Northwest Area	390	7.9%	2.3%	1,235	5.6%	1.1%
Oahe Area	533	3.0%	1.2%	1,461	2.8%	0.7%
Pickstown Area	710	7.2%	1.7%	2,034	8.3%	1.1%
Pine Ridge Area	1,251	13.1%	1.7%	3,838	13.5%	1.0%
Rapid City Area	2,697	7.0%	0.8%	7,731	6.1%	0.5%
Southeast Area	648	8.3%	1.9%	1,972	7.3%	1.0%
Sioux Falls Area	2,330	7.7%	0.9%	6,721	6.9%	0.5%
Sioux Empire Area	427	5.4%	1.8%	1,268	4.3%	1.0%
South Central	573	6.5%	1.8%	1,647	6.4%	1.0%
Southern Black Hills	210	11.4%	3.8%	665	9.9%	2.0%
Statewide PedNSS	**14,018**	**7.6%**	**0.4%**	**41,107**	**7.0%**	**0.2%**
National 2002		**13.1%**				
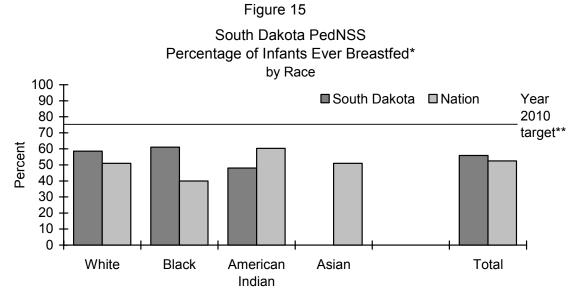
Shaded rows indicate the three-year data are significantly higher than the state three-year data at the 0.05 level.
 (8) Anemia: Hemoglobin (Hb) concentrations or hematocrit (Hct) values less than 5th percentile of NHANES III survey,
      children 6 months to 5 years of age included in the analysis.
** Counties by regions and regions by county conversion tables are in Appendix A and Appendix B.

Breastfeeding

Initiation

The Healthy People 2010 objective is to increase the proportion of mothers who breastfeed their babies in the early postpartum period to at least 75 percent, 50 percent at 6 months and at least 25 percent at one year.

The percent of the PedNSS population in the state in 2003 for children 2 years of age and under ever breastfed was 55.9 percent. This shows a decrease over the 2002 rate of 56.7 percent. The three-year rate for 2001 through 2003 PedNSS population was 55.4 percent. The United States rate for the PedNSS population that had ever breastfed was 52.5 percent in calendar year 2001.

Figure 15

South Dakota PedNSS
Percentage of Infants Ever Breastfed*
by Race

* Among infants born during the reporting period.
** Increase the proportion of mothers who breastfeed their babies in the early postpartum period to 75%.
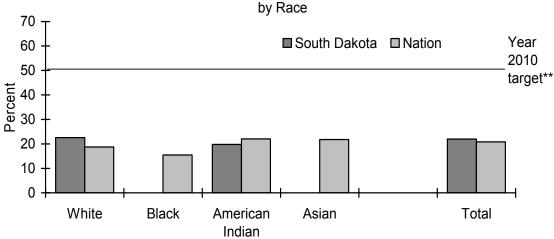
The South Dakota PedNSS populations by race in 2003 who ever breastfed was 58.6 percent for whites, 61.1 percent for blacks, and 48.0 percent for American Indian.
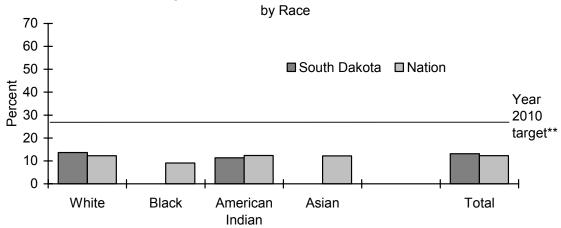
Six Months or More

Figure 16

South Dakota PedNSS
Percentage of Infants Breastfed at Least 6 Months*
by Race

* Among infants who turned 6 months of age during the reporting period.
** Year 2010 target: increase the proportion of mothers who breastfeed their babies at 6 months to 50%.

Figure 17

South Dakota PedNSS
Percentage of Infants Breastfed at Least 12 Months*
by Race

* Among infants who turned 12 months of age during the reporting period.
** Increase the proportion of mothers who breastfeed their babies at 1 year to 25%.

The percent of infants in the South Dakota PedNSS population that were breastfed at least 6 months in 2003 was 22.0 percent. This shows a decrease over the 2002 rate of 24.1 percent. The three-year rate for the 2001 through 2003 PedNSS population was 20.2. In the United States PedNSS population the percent of infants that were breastfed at least 6 months was 20.8 percent in calendar year 2002.

The percent of South Dakota PedNSS infant's breastfed at least 6 months by race or ethnicity in 2003 was 22.5 percent for whites and 19.8 percent for American Indians and Alaskan Natives.

The percent of infants in the South Dakota PedNSS population that were breastfed at least 12 months in 2003 was 13.1 percent. This shows a decrease over the 2002 rate of 14.1 percent. The three-year rate for the 2001 through 2003 PedNSS population was 11.6. In the United States PedNSS population the percent of infants that were breastfed at least 12 months was 12.3 percent in calendar year 2001.

The percent of South Dakota PedNSS infant's breastfed at least 12 months by race or ethnicity in 2003 was 13.6 percent for whites and 11.3 percent for American Indians and Alaskan Natives.

Table 19

Pediatric Nutrition Surveillance System
Ever Breastfed
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Ever Breastfed (9)			Three Year Data (2001-2003) Ever Breastfed (9)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aurora	**15**	*	*	**58**	*	*
Plankinton	15	*	*	58	*	*
Beadle	**89**	*	*	**359**	**57.7%**	**6.6%**
Huron	89	*	*	359	57.7%	6.6%
Bennett	**42**	*	*	**144**	**56.9%**	**10.3%**
Martin	42	*	*	144	56.9%	10.3%
Bon Homme	**33**	*	*	**110**	**40.0%**	**9.9%**
Tyndall	33	*	*	110	40.0%	9.9%
Brookings	**122**	**58.2%**	**11.4%**	**395**	**63.0%**	**6.6%**
Brookings	122	58.2%	11.4%	395	63.0%	6.6%
Brown	**211**	**47.4%**	**7.8%**	**624**	**47.4%**	**4.5%**
Aberdeen	211	47.4%	7.8%	624	47.4%	4.5%
Brule	**18**	*	*	**89**	*	*
Chamberlain	15	*	*	75	*	*
Kimball	3	*	*	14	*	*
Buffalo	**57**	*	*	**172**	**33.1%**	**7.2%**
Ft. Thompson	57	*	*	172	33.1%	7.2%
Butte	**60**	*	*	**236**	**50.8%**	**7.6%**
Belle Fourche	51	*	*	198	49.5%	8.2%
Newell	9	*	*	38	*	*
Charles Mix	**102**	**54.9%**	**12.1%**	**345**	**53.6%**	**6.5%**
Lake Andes	33	*	*	104	51.9%	11.6%
Platte	5	*	*	28	*	*
Wagner	64	*	*	213	51.2%	8.1%
Clark	**12**	*	*	**47**	*	*
Clark	12	*	*	47	*	*
Clay	**65**	*	*	**238**	**63.9%**	**8.5%**
Vermillion	65	*	*	238	63.9%	8.5%
Codington	**173**	**46.8%**	**8.6%**	**551**	**49.9%**	**5.0%**
Watertown	173	46.8%	8.6%	551	49.9%	5.0%
Corson	**1**	*	*	**10**	*	*
McLaughlin	1	*	*	10	*	*
Custer	**26**	*	*	**82**	*	*
Custer	26	*	*	82	*	*
Davison	**128**	**52.3%**	**10.5%**	**416**	**48.8%**	**5.6%**
Mitchell	128	52.3%	10.5%	416	48.8%	5.6%
Day	**27**	*	*	**100**	**56.0%**	**12.3%**
Webster	27	*	*	100	56.0%	12.3%
Deuel	**14**	*	*	**39**	*	*
Clear Lake	14	*	*	39	*	*

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.
 (9) Percent of infants born during the reporting period that were ever breastfed.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
    reliability or precision.

Table 19 (Continued)

Pediatric Nutrition Surveillance System
Ever Breastfed
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Ever Breastfed (9)			Three Year Data (2001-2003) Ever Breastfed (9)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Dewey	**18**	*	*	**46**	*	*
Isabel	2	*	*	13	*	*
Timber Lake	16	*	*	33	*	*
Douglas	**14**	*	*	**39**	*	*
Armour	14	*	*	39	*	*
Edmunds	**9**	*	*	**32**	*	*
Bowdle	4	*	*	22	*	*
Ipswich	5	*	*	10	*	*
Fall River	**43**	*	*	**139**	**67.6%**	**11.5%**
Hot Springs	43	*	*	139	67.6%	11.5%
Faulk	**7**	*	*	**26**	*	*
Faulkton	7	*	*	26	*	*
Grant	**40**	*	*	**158**	**48.1%**	**9.1%**
Milbank	40	*	*	158	48.1%	9.1%
Gregory	**23**	*	*	**80**	*	*
Bonesteel	6	*	*	16	*	*
Burke	17	*	*	64	*	*
Haakon	**8**	*	*	**35**	*	*
Philip	8	*	*	35	*	*
Hamlin	**40**	*	*	**106**	**79.2%**	**14.2%**
Hayti	40	*	*	106	79.2%	14.2%
Hand	**19**	*	*	**51**	*	*
Miller	19	*	*	51	*	*
Hanson	**15**	*	*	**55**	*	*
Alexandria	15	*	*	55	*	*
Harding	**2**	*	*	**12**	*	*
Buffalo	2	*	*	12	*	*
Hughes	**127**	**47.2%**	**10.0%**	**347**	**47.6%**	**6.1%**
Pierre	127	47.2%	10.0%	347	47.6%	6.1%
Hutchinson	**22**	*	*	**85**	*	*
Freeman	7	*	*	45	*	*
Parkston	15	*	*	40	*	*
Hyde	**6**	*	*	**25**	*	*
Highmore	6	*	*	25	*	*
Jackson	**39**	*	*	**148**	**43.2%**	**8.9%**
Kadoka	6	*	*	29	*	*
Wanblee	33	*	*	119	46.2%	10.2%
Jerauld	**12**	*	*	**24**	*	*
Wessington Springs	12	*	*	24	*	*
Jones	**9**	*	*	**33**	*	*
Murdo	9	*	*	33	*	*

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.
 (9) Percent of infants born during the reporting period that were ever breastfed.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
    reliability or precision.

Table 19 (Continued)

Pediatric Nutrition Surveillance System
Ever Breastfed
Reporting Period 01/01/2003 to 12/31/2003

County	2003 Data Ever Breastfed (9)			Three Year Data (2001-2003) Ever Breastfed (9)		
Clinic	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Kingsbury	**8**	*	*	**32**	*	*
De Smet	8	*	*	32	*	*
Lake	**59**	*	*	**168**	**65.5%**	**10.3%**
Madison	59	*	*	168	65.5%	10.3%
Lawrence	**123**	**67.2%**	**12.2%**	**414**	**64.3%**	**6.5%**
Deadwood	36	*	*	133	54.9%	10.6%
Spearfish	87	*	*	281	68.7%	8.1%
Lincoln	**31**	*	*	**108**	**47.2%**	**10.9%**
Canton	31	*	*	108	47.2%	10.9%
Lyman	**49**	*	*	**146**	**50.0%**	**9.6%**
Kennebec	9	*	*	26	*	*
Lower Brule	40	*	*	120	48.3%	10.4%
Marshall	**12**	*	*	**36**	*	*
Britton	12	*	*	36	*	*
McCook	**31**	*	*	**77**	*	*
Salem	31	*	*	77	*	*
McPherson	**10**	*	*	**30**	*	*
Eureka	4	*	*	17	*	*
Leola	6	*	*	13	*	*
Meade	**82**	*	*	**288**	**54.5%**	**7.2%**
Faith	12	*	*	31	*	*
Sturgis	70	*	*	257	54.5%	7.6%
Miner	**9**	*	*	**30**	*	*
Howard	9	*	*	30	*	*
Minnehaha	**1,065**	**55.6%**	**3.8%**	**3,328**	**56.9%**	**2.2%**
Sioux Falls - Downtown	59	*	*	653	56.5%	4.8%
Sioux Falls - Eastside	490	55.9%	5.6%	1,302	55.3%	3.4%
Sioux Falls - Westside	516	55.6%	5.4%	1,373	58.6%	3.4%
Moody	**38**	*	*	**114**	**56.1%**	**11.5%**
Flandreau	38	*	*	114	56.1%	11.5%
Pennington	**993**	**64.9%**	**4.2%**	**3,274**	**62.5%**	**2.3%**
Ellsworth	143	77.6%	12.1%	509	69.5%	6.1%
Hill City	11	*	*	47	*	*
Rapid City	831	62.7%	4.5%	2,689	60.9%	2.5%
Wall	8	*	*	29	*	*
Perkins	**16**	*	*	**64**	*	*
Bison	2	*	*	18	*	*
Lemmon	14	*	*	46	*	*

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.
 (9) Percent of infants born during the reporting period that were ever breastfed.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 19 (Continued)

Pediatric Nutrition Surveillance System
Ever Breastfed
Reporting Period 01/01/2003 to 12/31/2003

County	2003 Data Ever Breastfed (9)			Three Year Data (2001-2003) Ever Breastfed (9)		
Clinic	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Potter	**13**	*	*	**41**	*	*
Hoven	13	*	*	41	*	*
Roberts	**112**	**48.2%**	**10.8%**	**356**	**47.8%**	**6.0%**
Sisseton	112	48.2%	10.8%	356	49.2%	6.1%
Sanborn	**12**	*	*	**44**	*	*
Woonsocket	12	*	*	44	*	*
Shannon	**350**	**49.1%**	**6.2%**	**1,056**	**49.2%**	**3.6%**
Kyle	88	*	*	265	52.5%	7.3%
Manderson	28	*	*	83	*	*
Pine Ridge	211	46.9%	7.8%	598	47.2%	4.6%
Porcupine	23	*	*	110	49.1%	11.0%
Spink	**33**	*	*	**100**	**54.0%**	**12.1%**
Redfield	33	*	*	100	54.0%	12.1%
Stanley	**21**	*	*	**66**	*	*
Ft. Pierre	21	*	*	66	*	*
Sully	**4**	*	*	**12**	*	*
Onida	4	*	*	12	*	*
Tripp	**36**	*	*	**123**	**38.2%**	**9.2%**
Winner	36	*	*	123	38.2%	9.2%
Turner	**24**	*	*	**79**	*	*
Parker	7	*	*	30	*	*
Viborg	17	*	*	49	*	*
Union	**43**	*	*	**150**	**42.7%**	**8.8%**
Elk Point	43	*	*	150	42.7%	8.8%
Walworth	**44**	*	*	**141**	**55.3%**	**10.3%**
Mobridge	39	*	*	127	53.5%	10.7%
Selby	5	*	*	14	*	*
Yankton	**138**	**49.3%**	**9.8%**	**428**	**47.2%**	**5.5%**
Yankton	138	49.3%	9.8%	428	47.2%	5.5%
Ziebach	**8**	*	*	**32**	*	*
Dupree	8	*	*	32	*	*
Healthy People 2010		**75%**			**75%**	
Statewide PedNSS	**5,012**	**55.9%**	**1.7%**	**16,193**	**55.4%**	**1.0%**
National 2002		**52.5%**				

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.
(9) Percent of infants born during the reporting period that were ever breastfed.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 20

Pediatric Nutrition Surveillance System
Ever Breastfed
Reporting Period 01/01/2003 to 12/31/2003

County**	2003 Data Ever Breastfed (9)			Three Year Data (2001-2003) Ever Breastfed (9)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aberdeen Area	250	49.2%	7.3%	760	48.3%	4.1%
East Central	208	63.0%	9.1%	647	64.6%	5.2%
Huron-Redfield	122	54.9%	11.0%	459	56.9%	5.8%
Mitchell-Chamberlain	200	53.5%	8.5%	686	49.1%	4.4%
Northern Black Hills	205	60.0%	8.9%	702	60.3%	4.8%
Northeast Area	351	48.7%	6.1%	1,151	49.4%	3.4%
North Central	71	*	*	239	53.6%	7.8%
Northwest Area	104	52.9%	11.7%	390	50.5%	5.9%
Oahe Area	190	50.0%	8.4%	542	50.0%	5.0%
Pickstown Area	194	50.5%	8.4%	659	49.8%	4.5%
Pine Ridge Area	431	49.0%	5.5%	1,348	49.4%	3.1%
Rapid City Area	993	64.9%	4.2%	3,274	62.5%	2.3%
Southeast Area	246	53.7%	7.7%	816	51.2%	4.1%
Sioux Falls Area	1,065	55.6%	3.8%	3,328	56.9%	2.2%
Sioux Empire Area	154	58.4%	10.1%	462	57.1%	5.8%
South Central	159	42.1%	8.5%	509	42.6%	4.8%
Southern Black Hills	69	*	*	221	71.9%	9.4%
Healthy People 2010		**75.0%**			**75.0%**	
Statewide PedNSS	**5,012**	**55.9%**	**1.7%**	**16,193**	**55.4%**	**1.0%**
National 2002		**52.5%**			**51.1%**	

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.
 (9) Percent of infants born during the reporting period that were ever breastfed.
*   Data from regions with less than 100 records per year were not analyzed as the values do not meet standards of reliability
      or precision.
** Counties by regions and regions by county conversion tables are in Appendix A and Appendix B.

Table 21

Pediatric Nutrition Surveillance System
Breastfed at 6 Months of Age
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Breastfed at Least 6 Months(10)			Three Year Data (2001-2003) Breastfed at Least 6 Months(10)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aurora	**9**	*	*	**44**	*	*
Plankinton	9	*	*	44	*	*
Beadle	**73**	*	*	**297**	**16.8%**	**3.9%**
Huron	73	*	*	297	16.8%	3.9%
Bennett	**28**	*	*	**114**	**25.4%**	**7.8%**
Martin	28	*	*	114	25.4%	7.8%
Bon Homme	**19**	*	*	**86**	*	*
Tyndall	19	*	*	86	*	*
Brookings	**60**	*	*	**288**	**28.8%**	**5.2%**
Brookings	60	*	*	288	28.8%	5.2%
Brown	**128**	**18.8%**	**6.3%**	**487**	**16.6%**	**3.0%**
Aberdeen	128	18.8%	6.3%	487	16.6%	3.0%
Brule	**18**	*	*	**70**	*	*
Chamberlain	15	*	*	61	*	*
Kimball	3	*	*	9	*	*
Buffalo	**38**	*	*	**141**	**5.7%**	**3.3%**
Ft. Thompson	38	*	*	141	5.7%	3.3%
Butte	**42**	*	*	**198**	**31.8%**	**6.6%**
Belle Fourche	35	*	*	167	31.1%	7.1%
Newell	7	*	*	31	*	*
Charles Mix	**53**	*	*	**262**	**17.2%**	**4.2%**
Lake Andes	14	*	*	80	*	*
Platte	8	*	*	25	*	*
Wagner	31	*	*	157	14.6%	5.0%
Clark	**9**	*	*	**42**	*	*
Clark	9	*	*	42	*	*
Clay	**45**	*	*	**191**	**20.4%**	**5.4%**
Vermillion	45	*	*	191	20.4%	5.4%
Codington	**98**	*	*	**410**	**16.6%**	**3.3%**
Watertown	98	*	*	410	16.6%	3.3%
Corson	**1**	*	*	**10**	*	*
McLaughlin	1	*	*	10	*	*
Custer	**18**	*	*	**61**	*	*
Custer	18	*	*	61	*	*
Davison	**69**	*	*	**295**	**13.2%**	**3.5%**
Mitchell	69	*	*	295	13.2%	3.5%
Day	**25**	*	*	**88**	*	*
Webster	25	*	*	88	*	*
Deuel	**9**	*	*	**27**	*	*
Clear Lake	9	*	*	27	*	*

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.
 (10) Percent of infants who turned 6 months of age during the reporting period by/on their date of visit and were breastfed at least 6 months.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 21 (Continued)

Pediatric Nutrition Surveillance System
Breastfed at 6 Months of Age
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Breastfed at Least 6 Months(10)			Three Year Data (2001-2003) Breastfed at Least 6 Months(10)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Dewey	**13**	*	*	**37**	*	*
Isabel	5	*	*	12	*	*
Timber Lake	8	*	*	25	*	*
Douglas	**11**	*	*	**37**	*	*
Armour	11	*	*	37	*	*
Edmunds	**8**	*	*	**28**	*	*
Bowdle	5	*	*	20	*	*
Ipswich	3	*	*	8	*	*
Fall River	**33**	*	*	**113**	**22.1%**	**7.3%**
Hot Springs	33	*	*	113	22.1%	7.3%
Faulk	**3**	*	*	**19**	*	*
Faulkton	3	*	*	19	*	*
Grant	**29**	*	*	**121**	**16.5%**	**6.1%**
Milbank	29	*	*	121	16.5%	6.1%
Gregory	**13**	*	*	**70**	*	*
Bonesteel	1	*	*	20	*	*
Burke	12	*	*	50	*	*
Haakon	**8**	*	*	**31**	*	*
Philip	8	*	*	31	*	*
Hamlin	**26**	*	*	**84**	*	*
Hayti	26	*	*	84	*	*
Hand	**5**	*	*	**39**	*	*
Miller	5	*	*	39	*	*
Hanson	**9**	*	*	**49**	*	*
Alexandria	9	*	*	49	*	*
Harding	**7**	*	*	**9**	*	*
Buffalo	7	*	*	9	*	*
Hughes	**61**	*	*	**250**	**11.6%**	**3.5%**
Pierre	61	*	*	250	11.6%	3.5%
Hutchinson	**24**	*	*	**67**	*	*
Freeman	14	*	*	37	*	*
Parkston	10	*	*	30	*	*
Hyde	**7**	*	*	**29**	*	*
Highmore	7	*	*	29	*	*
Jackson	**32**	*	*	**123**	**24.4%**	**7.3%**
Kadoka	4	*	*	26	*	*
Wanblee	28	*	*	97	*	*
Jerauld	**6**	*	*	**16**	*	*
Wessington Springs	6	*	*	16	*	*
Jones	**7**	*	*	**27**	*	*
Murdo	7	*	*	27	*	*

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.
 (10) Percent of infants who turned 6 months of age during the reporting period by/on their date of visit and were breastfed at least 6 months.
* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 21 (Continued)

Pediatric Nutrition Surveillance System
Breastfed at 6 Months of Age
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Breastfed at Least 6 Months(10)			Three Year Data (2001-2003) Breastfed at Least 6 Months(10)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Kingsbury	**4**	*	*	**30**	*	*
De Smet	4	*	*	30	*	*
Lake	**28**	*	*	**130**	**16.2%**	**5.8%**
Madison	28	*	*	130	16.2%	5.8%
Lawrence	**74**	*	*	**324**	**31.2%**	**5.1%**
Deadwood	26	*	*	96	*	*
Spearfish	48	*	*	228	35.1%	6.5%
Lincoln	**15**	*	*	**78**	*	*
Canton	15	*	*	78	*	*
Lyman	**37**	*	*	**127**	**16.5%**	**5.9%**
Kennebec	6	*	*	19	*	*
Lower Brule	31	*	*	108	16.7%	6.5%
Marshall	**5**	*	*	**24**	*	*
Britton	5	*	*	24	*	*
McCook	**18**	*	*	**57**	*	*
Salem	18	*	*	57	*	*
McPherson	**9**	*	*	**27**	*	*
Eureka	5	*	*	16	*	*
Leola	4	*	*	11	*	*
Meade	**45**	*	*	**234**	**17.5%**	**4.5%**
Faith	6	*	*	28	*	*
Sturgis	39	*	*	206	14.1%	4.3%
Miner	**7**	*	*	**25**	*	*
Howard	7	*	*	25	*	*
Minnehaha	**510**	**22.0%**	**3.4%**	**2,237**	**19.4%**	**1.5%**
Sioux Falls - Downtown	11	*	*	554	17.7%	2.9%
Sioux Falls - Eastside	235	17.9%	4.5%	835	18.4%	2.4%
Sioux Falls - Westside	264	25.8%	5.1%	848	21.5%	2.6%
Moody	**21**	*	*	**91**	*	*
Flandreau	21	*	*	91	*	*
Pennington	**551**	**24.3%**	**3.5%**	**2,406**	**22.2%**	**1.6%**
Ellsworth	83	*	*	363	24.5%	4.3%
Hill City	11	*	*	38	*	*
Rapid City	452	22.8%	3.7%	1,981	21.6%	1.7%
Wall	5	*	*	24	*	*
Perkins	**19**	*	*	**53**	*	*
Bison	6	*	*	16	*	*
Lemmon	13	*	*	37	*	*

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.

(10) Percent of infants who turned 6 months of age during the reporting period by/on their date of visit and were breastfed at least 6 months.

* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 21 (Continued)

Pediatric Nutrition Surveillance System
Breastfed at 6 Months of Age
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Breastfed at Least 6 Months(10)			Three Year Data (2001-2003) Breastfed at Least 6 Months(10)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Potter	**5**	*	*	**29**	*	*
Hoven	5	*	*	29	*	*
Roberts	**62**	*	*	**270**	**17.8%**	**4.2%**
Sisseton	62	*	*	270	17.8%	4.2%
Sanborn	**7**	*	*	**36**	*	*
Woonsocket	7	*	*	36	*	*
Shannon	**179**	**24.6%**	**6.1%**	**793**	**23.6%**	**2.8%**
Kyle	54	*	*	203	25.6%	5.8%
Manderson	17	*	*	63	*	*
Pine Ridge	88	*	*	437	21.1%	3.6%
Porcupine	20	*	*	90	*	*
Spink	**21**	*	*	**81**	*	*
Redfield	21	*	*	81	*	*
Stanley	**18**	*	*	**58**	*	*
Ft. Pierre	18	*	*	58	*	*
Sully	**2**	*	*	**10**	*	*
Onida	2	*	*	10	*	*
Tripp	**24**	*	*	**105**	**14.3%**	**6.1%**
Winner	24	*	*	105	14.3%	6.1%
Turner	**11**	*	*	**57**	*	*
Parker	5	*	*	21	*	*
Viborg	6	*	*	36	*	*
Union	**25**	*	*	**105**	**14.3%**	**6.1%**
Elk Point	25	*	*	105	14.3%	6.1%
Walworth	**21**	*	*	**115**	**17.4%**	**6.4%**
Mobridge	18	*	*	108	15.7%	6.3%
Selby	3	*	*	7	*	*
Yankton	**75**	*	*	**322**	**14.9%**	**3.5%**
Yankton	75	*	*	322	14.9%	3.5%
Ziebach	**4**	*	*	**23**	*	*
Dupree	4	*	*	23	*	*
Healthy People 2010		**50%**			**50%**	
Statewide PedNSS	**2,841**	**22.0%**	**1.4%**	**12,107**	**20.2%**	**0.7%**
National 2002		**20.8%**				

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.
 (10) Percent of infants who turned 6 months of age during the reporting period by/on their date of visit and were breastfed at
     least 6 months.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
     reliability or precision.

Table 22

Pediatric Nutrition Surveillance System
Breastfed at 6 Months of Age
Reporting Period 01/01/2003 to 12/31/2003

Region**	2003 Data Breastfed at Least 6 Months(10)			Three Year Data (2001-2003) Breastfed at Least 6 Months(10)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aberdeen Area	158	20.9%	6.0%	599	17.7%	2.8%
East Central	111	32.4%	8.9%	493	31.8%	4.2%
Huron-Redfield	94	*	*	378	18.5%	3.6%
Mitchell-Chamberlain	118	13.6%	5.6%	510	16.7%	3.0%
Northern Black Hills	119	28.6%	8.1%	558	25.4%	3.5%
Northeast Area	207	18.8%	5.0%	870	17.2%	2.3%
North Central	42	*	*	199	20.1%	5.2%
Northwest Area	85	*	*	320	27.5%	4.8%
Oahe Area	98	*	*	415	13.5%	3.0%
Pickstown Area	120	15.8%	6.0%	522	16.1%	2.9%
Pine Ridge Area	239	27.2%	5.5%	1,030	23.9%	2.5%
Rapid City Area	551	24.3%	3.5%	2,406	22.2%	1.6%
Southeast Area	145	21.4%	6.3%	618	16.5%	2.7%
Sioux Falls Area	510	22.0%	3.4%	2,237	19.4%	1.5%
Sioux Empire Area	79	*	*	347	16.7%	3.6%
South Central	114	10.5%	5.0%	431	12.5%	2.8%
Southern Black Hills	51	*	*	174	21.3%	5.8%
Healthy People 2010		**50.0%**			**50.0%**	
Statewide PedNSS	**2,841**	**22.0%**	**1.4%**	**12,107**	**20.2%**	**0.7%**
National 2002		**20.8%**				

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.
 (10) Percent of infants who turned 6 months of age during the reporting period by/on their date of visit and were breastfed at least 6 months.
 *   Data from regions with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.
 ** Counties by regions and regions by county conversion tables are in Appendix A and Appendix B.

Table 23

Pediatric Nutrition Surveillance System
Breastfed at 12 Months of Age
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Breastfed at Least 12 Months(11)			Three Year Data (2001-2003) Breastfed at Least 12 Months(11)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aurora	**9**	*	*	**44**	*	*
Plankinton	9	*	*	44	*	*
Beadle	**60**	*	*	**248**	**8.1%**	**3.0%**
Huron	60	*	*	248	8.1%	3.0%
Bennett	**22**	*	*	**96**	*	*
Martin	22	*	*	96	*	*
Bon Homme	**24**	*	*	**76**	*	*
Tyndall	24	*	*	76	*	*
Brookings	**57**	*	*	**239**	**18.8%**	**4.6%**
Brookings	57	*	*	239	18.8%	4.6%
Brown	**92**	*	*	**367**	**9.3%**	**2.6%**
Aberdeen	92	*	*	367	9.3%	2.6%
Brule	**16**	*	*	**54**	*	*
Chamberlain	12	*	*	46	*	*
Kimball	4	*	*	8	*	*
Buffalo	**24**	*	*	**118**	**3.4%**	**2.8%**
Ft. Thompson	24	*	*	118	3.4%	2.8%
Butte	**36**	*	*	**163**	**27.6%**	**6.8%**
Belle Fourche	29	*	*	136	27.2%	7.4%
Newell	7	*	*	27	*	*
Charles Mix	**56**	*	*	**243**	**7.8%**	**2.9%**
Lake Andes	15	*	*	71	*	*
Platte	4	*	*	23	*	*
Wagner	37	*	*	149	6.7%	3.5%
Clark	**6**	*	*	**38**	*	*
Clark	6	*	*	38	*	*
Clay	**34**	*	*	**152**	**9.9%**	**4.2%**
Vermillion	34	*	*	152	9.9%	4.2%
Codington	**78**	*	*	**332**	**9.6%**	**2.8%**
Watertown	78	*	*	332	9.6%	2.8%
Corson	**0**	*	*	**10**	*	*
McLaughlin	0	*	*	10	*	*
Custer	**13**	*	*	**48**	*	*
Custer	13	*	*	48	*	*
Davison	**71**	*	*	**239**	**6.7%**	**2.8%**
Mitchell	71	*	*	239	6.7%	2.8%
Day	**22**	*	*	**81**	*	*
Webster	22	*	*	81	*	*
Deuel	**5**	*	*	**24**	*	*
Clear Lake	5	*	*	24	*	*

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.
 (11) Percent of children who turned 12 months of age during the reporting period by/on their date of visit and were breastfed at least 12 months.
 *   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 23 (Continued)

Pediatric Nutrition Surveillance System
Breastfed at 12 Months of Age
Reporting Period 01/01/2003 to 12/31/2003

County Clinic	2003 Data Breastfed at Least 12 Months(11)			Three Year Data (2001-2003) Breastfed at Least 12 Months(11)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Dewey	**8**	*	*	**30**	*	*
Isabel	2	*	*	9	*	*
Timber Lake	6	*	*	21	*	*
Douglas	**3**	*	*	**28**	*	*
Armour	3	*	*	28	*	*
Edmunds	**6**	*	*	**25**	*	*
Bowdle	6	*	*	20	*	*
Ipswich	0	*	*	5	*	*
Fall River	**21**	*	*	**83**	*	*
Hot Springs	21	*	*	83	*	*
Faulk	**9**	*	*	**23**	*	*
Faulkton	9	*	*	23	*	*
Grant	**15**	*	*	**95**	*	*
Milbank	15	*	*	95	*	*
Gregory	**12**	*	*	**62**	*	*
Bonesteel	3	*	*	21	*	*
Burke	9	*	*	41	*	*
Haakon	**9**	*	*	**29**	*	*
Philip	9	*	*	29	*	*
Hamlin	**21**	*	*	**71**	*	*
Hayti	21	*	*	71	*	*
Hand	**7**	*	*	**35**	*	*
Miller	7	*	*	35	*	*
Hanson	**13**	*	*	**46**	*	*
Alexandria	13	*	*	46	*	*
Harding	**2**	*	*	**7**	*	*
Buffalo	2	*	*	7	*	*
Hughes	**60**	*	*	**196**	**6.1%**	**2.9%**
Pierre	60	*	*	196	6.1%	2.9%
Hutchinson	**9**	*	*	**52**	*	*
Freeman	5	*	*	28	*	*
Parkston	4	*	*	24	*	*
Hyde	**5**	*	*	**23**	*	*
Highmore	5	*	*	23	*	*
Jackson	**19**	*	*	**107**	**11.2%**	**5.3%**
Kadoka	5	*	*	28	*	*
Wanblee	14	*	*	79	*	*
Jerauld	**1**	*	*	**16**	*	*
Wessington Springs	1	*	*	16	*	*
Jones	**5**	*	*	**23**	*	*
Murdo	5	*	*	23	*	*

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.
 (11) Percent of children who turned 12 months of age during the reporting period by/on their date of visit and were breastfed
    at least 12 months.
*   Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of
    reliability or precision.

Table 23 (Continued)

Pediatric Nutrition Surveillance System
Breastfed at 12 Months of Age
Reporting Period 01/01/2003 to 12/31/2003

County	2003 Data Breastfed at Least 12 Months(11)			Three Year Data (2001-2003) Breastfed at Least 12 Months(11)		
Clinic	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Kingsbury	**6**	*	*	**27**	*	*
De Smet	6	*	*	27	*	*
Lake	**23**	*	*	**91**	*	*
Madison	23	*	*	91	*	*
Lawrence	**65**	*	*	**226**	**21.7%**	**5.1%**
Deadwood	14	*	*	67	*	*
Spearfish	51	*	*	159	26.4%	6.7%
Lincoln	**18**	*	*	**68**	*	*
Canton	18	*	*	67	*	*
Lyman	**27**	*	*	**117**	**7.7%**	**4.2%**
Kennebec	2	*	*	16	*	*
Lower Brule	25	*	*	101	8.9%	4.9%
Marshall	**3**	*	*	**24**	*	*
Britton	3	*	*	24	*	*
McCook	**7**	*	*	**44**	*	*
Salem	7	*	*	44	*	*
McPherson	**5**	*	*	**19**	*	*
Eureka	1	*	*	10	*	*
Leola	4	*	*	9	*	*
Meade	**59**	*	*	**199**	**12.6%**	**4.1%**
Faith	10	*	*	27	*	*
Sturgis	49	*	*	172	11.0%	4.2%
Miner	**3**	*	*	**22**	*	*
Howard	3	*	*	22	*	*
Minnehaha	**404**	**11.4%**	**2.8%**	**1,588**	**10.9%**	**1.4%**
Sioux Falls - Downtown	16	*	*	439	10.5%	2.5%
Sioux Falls - Eastside	186	12.9%	4.3%	579	12.3%	2.4%
Sioux Falls - Westside	202	9.9%	3.6%	570	9.8%	2.2%
Moody	**16**	*	*	**72**	*	*
Flandreau	16	*	*	72	*	*
Pennington	**520**	**14.2%**	**2.7%**	**1,958**	**11.7%**	**1.3%**
Ellsworth	64	*	*	300	10.3%	3.0%
Hill City	15	*	*	32	*	*
Rapid City	436	14.4%	3.0%	1,600	12.0%	1.4%
Wall	5	*	*	26	*	*
Perkins	**21**	*	*	**55**	*	*
Bison	6	*	*	15	*	*
Lemmon	15	*	*	40	*	*

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.

(11) Percent of children who turned 12 months of age during the reporting period by/on their date of visit and were breastfed at least 12 months.

* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 23 (Continued)

Pediatric Nutrition Surveillance System
Breastfed at 12 Months of Age
Reporting Period 01/01/2003 to 12/31/2003

County	2003 Data Breastfed at Least 12 Months(11)			Three Year Data (2001-2003) Breastfed at Least 12 Months(11)		
Clinic	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Potter	**6**	*	*	**25**	*	*
Hoven	6	*	*	25	*	*
Roberts	**46**	*	*	**248**	**10.9%**	**3.4%**
Sisseton	46	*	*	248	10.9%	3.4%
Sanborn	**4**	*	*	**30**	*	*
Woonsocket	4	*	*	30	*	*
Shannon	**148**	**21.6%**	**6.3%**	**634**	**18.9%**	**2.8%**
Kyle	34	*	*	169	19.5%	5.6%
Manderson	9	*	*	46	*	*
Pine Ridge	82	*	*	347	17.3%	3.7%
Porcupine	23	*	*	72	*	*
Spink	**22**	*	*	**72**	*	*
Redfield	22	*	*	72	*	*
Stanley	**16**	*	*	**46**	*	*
Ft. Pierre	16	*	*	46	*	*
Sully	**1**	*	*	**7**	*	*
Onida	1	*	*	7	*	*
Tripp	**20**	*	*	**79**	*	*
Winner	20	*	*	79	*	*
Turner	**9**	*	*	**45**	*	*
Parker	4	*	*	19	*	*
Viborg	5	*	*	26	*	*
Union	**19**	*	*	**72**	*	*
Elk Point	19	*	*	72	*	*
Walworth	**17**	*	*	**99**	*	*
Mobridge	13	*	*	88	*	*
Selby	4	*	*	11	*	*
Yankton	**68**	*	*	**260**	**6.2%**	**2.5%**
Yankton	68	*	*	260	6.2%	2.5%
Ziebach	**5**	*	*	**25**	*	*
Dupree	5	*	*	25	*	*
Healthy People 2010		**25%**			**25%**	
Statewide PedNSS	**2,408**	**13.1%**	**1.2%**	**9,675**	**11.6%**	**0.6%**
National 2002		**12.3%**				

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.

(11) Percent of children who turned 12 months of age during the reporting period by/on their date of visit and were breastfed at least 12 months.

* Data from counties with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.

Table 24

Pediatric Nutrition Surveillance System
Breastfed at 12 Months of Age
Reporting Period 01/01/2003 to 12/31/2003

Region**	2003 Data Breastfed at Least 12 Months(11)			Three Year Data (2001-2003) Breastfed at Least 12 Months(11)		
	Total Records	Percent	Confidence Interval	Total Records	Percent	Confidence Interval
Aberdeen Area	117	16.2%	6.1%	472	10.6%	2.5%
East Central	100	22.0%	7.7%	409	18.6%	3.5%
Huron-Redfield	82	*	*	320	7.5%	2.5%
Mitchell-Chamberlain	114	7.9%	4.3%	429	6.3%	2.0%
Northern Black Hills	124	22.6%	7.0%	425	17.4%	3.3%
Northeast Area	150	13.3%	4.9%	737	10.4%	2.0%
North Central	37	*	*	176	9.1%	3.7%
Northwest Area	72	*	*	280	18.9%	4.3%
Oahe Area	95	*	*	332	7.8%	2.5%
Pickstown Area	104	5.8%	3.9%	461	8.5%	2.2%
Pine Ridge Area	189	20.1%	5.4%	837	17.4%	2.4%
Rapid City Area	520	14.2%	2.7%	1,958	11.7%	1.3%
Southeast Area	121	9.1%	4.5%	484	8.3%	2.2%
Sioux Falls Area	404	11.4%	2.8%	1,588	10.9%	1.4%
Sioux Empire Area	60	*	*	270	8.9%	3.0%
South Central	85	*	*	366	6.0%	2.1%
Southern Black Hills	34	*	*	131	16.8%	5.9%
Healthy People 2010		**25.0%**			**25.0%**	
Statewide PedNSS	**2,408**	**13.1%**	**1.2%**	**9,675**	**11.6%**	**0.6%**
National 2002		**12.3%**				

Shaded rows indicate the three-year data are significantly lower than the state three-year data at the 0.05 level.
 (11) Percent of children who turned 12 months of age during the reporting period by/on their date of visit and were breastfed at least 12 months.
* Data from regions with less than 100 records per year were not analyzed as the values do not meet standards of reliability or precision.
** Counties by regions and regions by county conversion tables are in Appendix A and Appendix B.

Table 14

Pediatric Nutrition Surveillance System
Statewide Summary of Indicators by Age and Race/Ethnicity
Reporting Period 01/01/2003 to 12/31/2003

Age	Birth weight			Height and Weight				≥ 2 Years Overweight			Anemia		Breastfeeding		
					Short Stature	Under Weight	Over Weight		At Risk %>85th	Over %≤95th				Duration	
	Number	Low %<2500	High %>4000	Number	%<5th	%<5th	%>95th	Number	& <95th		Number	% Low	Ever	6+ Mo.	12+ Mo.

White

Age	Number	Low %<2500	High %>4000	Number	%<5th	%<5th	%>95th	Number	& <95th	%≤95th	Number	% Low	Ever	6+ Mo.	12+ Mo.
< 1 Year	3,489	8.3%	8.5%	5,400	9.6%	4.9%	8.7%	0	0.0%	0.0%	2,276	10.1%	Breastfeeding data is for		
1 Year				2,454	5.5%	3.4%	13.3%	0	0.0%	0.0%	2,689	7.0%	ages through 23 months		
2-4 Years				5,746	4.6%	2.9%	11.2%	5,746	16.5%	11.2%	4,751	4.6%			
Total				13,600	6.7%	3.8%	10.6%	5,746	16.5%	11.2%	9,716	6.6%	58.6	22.5	13.6

Black

Age	Number	Low %<2500	High %>4000	Number	%<5th	%<5th	%>95th	Number	& <95th	%≤95th	Number	% Low	Ever	6+ Mo.	12+ Mo.
< 1 Year	127	7.1%	9.4%	190	6.8%	5.3%	9.5%	0	0.0%	0.0%	70	*	Breastfeeding data is for		
1 Year				109	3.7%	5.5%	14.7%	0	0.0%	0.0%	110	*	ages through 23 months		
2-4 Years				214	1.9%	5.1%	15.9%	214	14.0%	15.9%	188	8.9%			
Total				513	4.1%	5.3%	13.3%	214	14.0%	15.9%	368	8.4%	61.1	*	*

American Indian or Alaskan Native

Age	Number	Low %<2500	High %>4000	Number	%<5th	%<5th	%>95th	Number	& <95th	%≤95th	Number	% Low	Ever	6+ Mo.	12+ Mo.
< 1 Year	1,269	6.6%	12.0%	1894	7.9%	4.0%	13.1%	0	0.0%	0.0%	718	11.1%	Breastfeeding data is for		
1 Year				958	3.0%	1.4%	25.4%	0	0.0%	0.0%	1,046	11.1%	ages through 23 months		
2-4 Years				2386	2.3%	1.8%	19.1%	2,386	21.0%	19.1%	2,028	8.6%			
Total				5238	4.4%	2.5%	18.1%	2,386	21.0%	19.1%	3,792	9.8%	48.0%	19.8%	11.3%

(*) Percentages are not calculated if <100 records are available for analysis after exclusions.

Table14 (Continued)

Pediatric Nutrition Surveillance System
Statewide Summary of Indicators by Age and Race/Ethnicity
Reporting Period 01/01/2003 to 12/31/2003

Age	Birth weight			Height and Weight				≥ 2 Years Overweight			Anemia		Breastfeeding		
		Low	High		Short Stature	Under Weight	Over Weight		At Risk %>85th	Over %≤95th				Duration	
	Number	%<2500	%>4000	Number	%<5th	%<5th	%>95th	Number	& <95th		Number	% Low	Ever	6+ Mo.	12+ Mo.

Asian or Pacific Islander

Age	Number	%<2500	%>4000	Number	%<5th	%<5th	%>95th	Number	& <95th	%≤95th	Number	% Low	Ever	6+ Mo.	12+ Mo.
< 1 Year	80	*	*	98	*	*	*	0	*	*	28	*	Breastfeeding data is for ages through 23 months		
1 Year				49	*	*	*	0	*	*	52	*			
2-4 Years				75	*	*	*	75	*	*	59	*			
Total				222	9.0%	5.0%	9.5%	75	*	*	139	14.4%	*	*	*

All Other

Age	Number	%<2500	%>4000	Number	%<5th	%<5th	%>95th	Number	& <95th	%≤95th	Number	% Low	Ever	6+ Mo.	12+ Mo.
< 1 Year	3	*	*	2	*	*	*	0	*	*	0	*	Breastfeeding data is for ages through 23 months		
1 Year				1	*	*	*	0	*	*	1	*			
2-4 Years				2	*	*	*	2	*	*	2	*			
Total				5	*	*	*	2	*	*	3	*	*	*	*

All Races and Ethnic Origins

Age	Number	%<2500	%>4000	Number	%<5th	%<5th	%>95th	Number	& <95th	%≤95th	Number	% Low	Ever	6+ Mo.	12+ Mo.
< 1 Year	4,968	8.0%	9.4%	7584	9.1%	4.7%	9.8%	0	0.0%	0.0%	3,092	10.3%	Breastfeeding data is for ages through 23 months		
1 Year				3571	4.8%	2.9%	16.6%	0	0.0%	0.0%	3,898	8.2%			
2-4 Years				8423	3.9%	2.7%	13.6%	8,423	17.7%	13.6%	7,028	6.0%			
Total				19578	6.1%	3.5%	12.7%	8,423	17.7%	13.6%	14,018	7.6%	55.9	22.0	13.1

(*) Percentages are not calculated if <100 records are available for analysis after exclusions.

Appendices

Appendix A

South Dakota PedNSS Counties by Regions

County	Region
Aurora	Mitchell-Chamberlain
Beadle	Huron-Redfield
Bennett	Pine Ridge Area
Bon Homme	Pickstown Area
Brookings	East Central
Brown	Aberdeen Area
Brule	Mitchell-Chamberlain
Buffalo	South Central
Butte	Northwest Area
Charles Mix	Pickstown Area
Clark	Northeast Area
Clay	Southeast Area
Codington	Northeast Area
Corson	North Central
Custer	Southern Black Hills
Davison	Mitchell-Chamberlain
Day	Aberdeen Area
Deuel	Northeast Area
Dewey	Northwest Area
Douglas	Pickstown Area
Edmunds	North Central
Fall River	Southern Black Hills
Faulk	North Central
Grant	Northeast Area
Gregory	Pickstown Area
Haakon	South Central
Hamlin	East Central
Hand	Oahe Area
Hanson	Mitchell-Chamberlain
Harding	Northwest Area
Hughes	Oahe Area
Hutchinson	Pickstown Area
Hyde	Oahe Area
Jackson	Pine Ridge Area
Jerauld	Mitchell-Chamberlain
Jones	South Central
Kingsbury	East Central
Lake	Sioux Empire Area
Lawrence	Northern Black Hills
Lincoln	Sioux Empire Area
Lyman	South Central
Marshall	Aberdeen Area

Appendix A (Continued)

South Dakota PedNSS Counties by Regions

County	Region
McCook	Sioux Empire Area
McPherson	North Central
Meade	Northern Black Hills
Mellette	South Central
Miner	Sioux Empire Area
Minnehaha	Sioux Falls Area
Moody	East Central
Pennington	Rapid City Area
Perkins	Northwest Area
Potter	Oahe Area
Roberts	Northeast Area
Sanborn	Mitchell-Chamberlain
Shannon	Pine Ridge Area
Spink	Huron-Redfield
Stanley	Oahe Area
Sully	Oahe Area
Tripp	South Central
Turner	Sioux Empire Area
Union	Southeast Area
Walworth	North Central
Yankton	Southeast Area
Ziebach	Northwest Area

Appendix B

South Dakota PedNSS Regions by County

Region	County
Aberdeen Area	Brown
	Day
	Marshall
East Central	Brookings
	Hamlin
	Kingsbury
	Moody
Huron-Redfield	Beadle
	Spink
Mitchell-Chamberlain	Aurora
	Brule
	Davison
	Hanson
	Jerauld
	Sanborn
North Central	Corson
	Edmunds
	Faulk
	McPherson
	Walworth
Northeast Area	Clark
	Codington
	Deuel
	Grant
	Roberts
Northern Black Hills	Lawrence
	Meade
Northwest Area	Butte
	Dewey
	Harding
	Perkins
	Ziebach
Oahe Area	Hand
	Hughes
	Hyde
	Potter
	Stanley
	Sully
Pickstown Area	Bon Homme
	Charles Mix
	Douglas
	Gregory
	Hutchinson

Appendix B (Continued)

South Dakota PedNSS Regions by County

Region	County
Pine Ridge Area	Bennett
	Jackson
	Shannon
Rapid City Area	Pennington
Sioux Empire Area	Lake
	Lincoln
	McCook
	Miner
	Turner
Sioux Falls Area	Minnehaha
South Central	Buffalo
	Haakon
	Jones
	Lyman
	Tripp
Southeast Area	Clay
	Union
	Yankton
Southern Black Hills	Custer
	Fall River